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# THE EFFECTS OF MARKET ORIENTATION

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## ABSTRACT

This research is designed to accomplish three goals. The first goal is to revisit the market orientation construct in order to define the different facets of it. A review of the market orientation literature is made to assess and synthesize the stock of accumulated knowledge regarding the market orientation construct.

The second goal of the research is to develop a theory of the effects of market orientation. Using the literature concerning resource-based theory and organizational learning four learning capabilities of market orientation are identified. These are market orientation information system, market orientation domainwidth, market orientation means alteration, and market orientation tacitness. They are hypothesized to have a positive impact on product adaption. Product adaption is expected to affect relative price (price premium), sales growth, and profitability.

A third goal of the research is to investigate the differences between the effects of market orientation for firms with a differentiation strategy emphasis in contrast to those with an overall cost leadership emphasis. It is argued that the impact of the four market orientation learning capabilities is greater for firms with a differentiation strategy emphasis.

The test of the model is done with data from the Norwegian hotel industry. The sample contains 372 cases. Both the measurement and the structural model achieve satisfactory fit to the data. Three out of four hypotheses concerning the impact of market orientation learning capabilities on product adaption are supported. The moderating effect of business strategy on market orientation learning capabilities' impact on product adaption are supported for two out of four hypotheses. The indirect effects of market orientation receives support for four out of five hypotheses.

Finally, in view of the observed results the contribution of this research is discussed in the concluding part of the dissertation.

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This dissertation is dedicated to my parents, Harriet and Kjell

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# INTRODUCTION

*In recent years, corporate management has come to recognize that the most successful companies are those with a clear market orientation (Gordon Canning jr., 1988)*

Market orientation is perceived by many academics and practitioners to be 'the very heart of modern marketing management and strategy' (Narver and Slater 1990:20). Accordingly, market orientation is a concept frequently used in textbooks and something that many managers believe is important. Consequently, much attention is assigned to augmenting market orientation - in businesses (e.g., see Kampanje 1994, number 2) as well as in the marketing literature (e.g., Kohli and Jaworski 1990; Deshpandé, Farley and Webster 1993; Day 1994; Slater and Narver 1995). Some of the implications of this attention and research are that organizations should assign (more) resources to conduct market oriented activities and adapt the organization (e.g., structures, routines, values) to facilitate market orientation. The reason for the attention toward market orientation is based on the belief that it will lead to better performance for the companies, and thus, should be adopted.

Although a number of studies have investigated the effects of market orientation on overall business performance and profitability (e.g., Narver and Slater 1990; Jaworski and Kohli 1993; Ruekert 1992), the broader knowledge about the effects of market orientation is limited. The impact of market orientation on overall business performance, such as profitability, has received mixed empirical support in the literature (Supporting studies: Narver

and Slater 1990; Jaworski and Kohli 1993; Ruekert 1992; Selnes, Kohli and Jaworski 1998; Slater and Narver 1994; Davis 1993, and nonsupporting studies: Narver, Jacobson and Slater 1993; Pelham 1993; Greenley 1995a; 1995b). These conflicting findings lead to the following question: *If the central lesson of modern marketing is that market oriented companies are generally more productive than non-market oriented companies, what is the reason for the mixed support in the empirical literature?* There may be many potential answers to the question. Three issues are considered and serve as research objectives of the study.

*First*, market orientation is a new construct. Accordingly, since the different studies use different definitions and operationalizations of market orientation, some approaches turn out to be related to overall business performance while others don't. As Kohli, Jaworski, and Kumar (1993) argue, little systematic effort has been devoted to the development of a valid measure of market orientation. Particularly, little effort has been done to assessing and synthesizing the stock of accumulated knowledge regarding the market orientation construct (for an exception, see Deshpandé and Farley 1996). The first research objective is to revisit the market orientation construct in order to define the different facets of it.

*Second*, building a theory of the effects of market orientation implies theorizing. Theorizing means knowledge about how market orientation is linked to overall business performance, like profitability, through intervening variables developed through a consistent body of arguments for why such effects exist. The current studies of market orientation suffer from a lack of theory of the effects of market orientation which has an explicit and implicit underpinning logic. Although, some studies attempt to contribute toward such theorizing (e.g., Slater and Narver 1995; Pelham 1993), more work has to be done (Jaworski and Kohli 1996; Dickson 1996). Following, Jaworski and Kohli (1993:65) such knowledge is not yet available in the literature:

Perhaps the most important area [in need of further research] relates to an assessment of the impact of a market orientation on business performance. ... It is important to note that business performance is a multidimensional construct and may be characterized in a number of ways, including effectiveness, efficiency, and adaptability. Furthermore, performance on one dimension may run counter to performance on other dimensions. Therefore, it would be useful to explore the complexities of the relationship between market orientation and alternative dimensions of business performance in future studies.

Thus, the second objective of this study is to contribute to the development of a theory of the

effects of market orientation which is based on a consistent body of knowledge.

*Third*, another answer to the opening question is that market orientation might be of uneven value to companies operating under different strategies. Although it is believed that market orientation is a superior means to achieve competitive advantage for all kinds of firms in market-based economies (cf., Kotler 1994; Kohli and Jaworski 1990; Shapiro 1988), such general impact is not obvious. According to business strategy, information and knowledge about the market is more important for businesses that hold a differentiation strategy than those holding an overall cost leadership strategy. Narver and Slater (1990) indicate that business strategy and market orientation are closely related, and, thus, a contingency view should be applied in studies of the effects of market orientation. Such a conditional approach to the effects is not made (for an exception, see Pelham 1993). The third research objective is to investigate the effects of market orientation under the choice of different business strategies.

As shown above, current knowledge about market orientation and its consequences may benefit from further research. Given the importance of the role of market orientation in the literature and practice, more knowledge about the effects is indeed needed. *This study attempts to develop a theory of the effects of market orientation.*

To accomplish the three goals of this research, the dissertation starts with an analysis of the construct of market orientation to explicitly define its boundaries and content (Chapter 2). This analysis attempts to review current definitions and synthesize the stock of accumulated knowledge regarding the content of market orientation. This analysis will be the starting point of the theory development. To develop the theory of the effects of market orientation, the resource-based view will be applied to identify an underpinning logic of the role of market orientation as dynamic learning capabilities within a company. This perspective has been claimed to contain significant potential for theorizing about the effects of market orientation (Sinkula 1994; Day 1994; Slater and Narver 1995; Jaworski and Kohli 1996; Hunt and Morgan 1995; Sinkula, Baker, and Noordewier 1997). A central part of the resource-based view is the dynamic capabilities in which organizational learning plays an important role (Teece, Pisano, and Shuen 1997; Mahoney 1995). Market orientation is a system of information generation, dissemination, and responsiveness, and thus, may serve as the organization's market orientation learning capability. These issues are elaborated in Chapter 3. To develop the theory of the effects of market orientation, the first part of Chapter 4 starts

with a discussion of the firm performance concept and results in a conceptual model for the study. The conceptual model and the resource-based view of market orientation are brought together in the subsequent parts of Chapter 4 to constitute the model and hypotheses. The moderating effects of business strategy is also included in Chapter 4 to consider the moderating effects on the effects of market orientation.

The research method used in the study is presented in Chapter 5 and the results from the empirical study are reported in Chapter 6. The dissertation is concluded in Chapter 7 where the contribution of the study is discussed and implications suggested.

## CHAPTER 2

# MARKET ORIENTATION

*Just about every company thinks of itself as market oriented.  
It's confident it has the strength to compete with the wolf pack,  
but in reality it's often weak and tends to follow the shepherd.  
(Benson P. Shapiro, 1988)*

The purpose of the chapter is to determine a conceptualization of market orientation for the study of its effects. The definition and operationalization of a construct is the starting point of the theory development process (Churchill 1979:67). The starting point for the research on the effects of market orientation is an assessment of the literature and the current conceptualizations of the market orientation construct. First, the market orientation literature is reviewed in Chapter 2.1. Second, the conceptualizations found in the literature are assessed using five evaluative criteria in Chapter 2.2 to develop a definition for use in this study. The understanding and definition of market orientation applied in the study is presented in Chapter 2.3.

## **2.1 A REVIEW OF THE MARKET ORIENTATION CONCEPT**

In the last eight years two main contributions of thought regarding the market orientation concept can be observed. The studies by Kohli and Jaworski (1990) and Narver and Slater (1990) were the first attempts to develop a fine-grained market orientation concept. Later, research has continued to improve each of these two market orientation conceptualizations (see e.g. Ruekert 1992; Pelham 1993; Greenley 1995a;b). In this review, the current conceptualizations of market orientation are presented in order to establish a starting point for this study's adaption of the concept. This will first include a review of Kohli and Jaworski's (1990) conceptualization (Chapter 2.1.1.), and then the work by Narver and Slater (1990) will be considered (Chapter 2.1.2). Third, a conclusion will be made of the review with comments on other studies using the conceptualizations of Kohli and Jaworski and Narver and Slater.

### **2.1.1 The market orientation conceptualization of Kohli and Jaworski**

Although market orientation as an idea has existed for several years, only modest attention has been given to the development of the concept of market orientation. Kohli and Jaworski (1990:1) claim that the marketing concept (as a cornerstone of the marketing discipline) is mainly a business philosophy (i.e. "an ideal or a policy statement"). The purpose of their study was to delineate the domain of the construct of market orientation, provide an operational definition, develop a propositional inventory, and construct a comprehensive framework for future research (Kohli and Jaworski 1990:1). They intended to draw attention to the marketing concept's implementation, as could be reflected in the activities and behaviors of the organization, which they label as "market orientation". Through extensive field interviews with sixty-two managers in different positions (both marketers and non-marketers) and organizations (both consumer products, industrial products, and services), together with a review of the marketing literature they developed the following definition of market orientation:



Market orientation is the organizationwide generation of market intelligence pertaining to current and future customer needs, dissemination of the intelligence across departments, and organizationwide responsiveness to it. (Kohli and Jaworski 1990:6)

This definition focuses on the organization's *information processing* regarding the market. It implies that market information is the foundation of the firm's market related behavior and the implementation of the marketing concept . A market oriented organization is assumed to generate, disseminate and respond to knowledge about the market place. Without such information (available for each of the decision makers within the organization) the organization will not be able to adapt its strategy and behavior to the various stakeholders in the market. The scope of information is defined by Kohli and Jaworski (1990:4) as attention on markets (that include customers and forces influencing them), which is consistent with the broader 'management of markets' perspective. The information scope is explained as follows:

..though market intelligence pertains to customer needs and preferences, it includes an analysis of how they may be affected by exogenous factors such as government regulations, technology, competitors, and other environmental forces. Environmental scanning activities are subsumed under market intelligence generation. (Kohli and Jaworski 1990:4)

The customers are defined as the current and the potential end users or distributors, and the market is defined as consisting of the exogenous forces that affect the customers' needs and preferences. However, in their own interpretation of the concept (i.e. the scale development process) they included relatively few factors outside customers, competitors, and distributors (Jaworski and Kohli 1993; Kohli, Jaworski and Kumar 1993). Therefore, potential and current customers (including distributors) and competitors are the dominant (but not whole) focus of their conceptualization. Another aspect of the information scope is the time horizon of the information generation process. Kohli and Jaworski (1990) argue that for the organization's decision making "the notion that market intelligence includes anticipated customer needs is important because it often takes years for an organization to develop a new product offering". Consequently, information should both capture the current situation and the future, anticipated situation of (current and potential) customers and competitors.

Moreover, Kohli and Jaworski provide an operationalization of each of the three dimensions of market orientation (i.e., information generation, information dissemination, and responsiveness). The first dimension of market orientation is *information generation*. The organization can gather information through multiple modes in order to capture rich and unbiased information. The modes can be formal as well as informal, can use primary as well as secondary data, and the information can be collected by marketers as well as non-marketers (Kohli and Jaworski 1990:4-5).

The second dimension of market orientation is *intelligence dissemination*. Kohli and Jaworski (1990:5) argue that it is "clear that responding effectively to a market need requires the participation of virtually all departments in an organization - R&D to design and develop a new product, manufacturing to gear up and produce it, purchasing to develop vendors for new parts/materials, finance to fund activities, and so on." Additionally, Kohli and Jaworski also include motivation of (i.e., 'sale' of market intelligence to) departments and individuals as part of the dissemination process. The dissemination dimension is an important aspect of market orientation for distinguishing between market orientation as a functional and as an organizational orientation (see e.g. Shapiro 1988). Kohli and Jaworski argue that market orientation is the organization's orientation, and that the firm's market behavior is more efficient when the whole organization is market driven. Intelligence dissemination is an effective mean for this purpose<sup>1</sup>. The dissemination modes include both formal and informal ways of communicating. Furthermore, the communication should be vertical (i.e., follows the hierarchical paths) as well as horizontal (i.e., lateral communication on different levels of the organization, both among managers and other employees).

The third dimension is *responsiveness*, which is the action and behavior taken in response to generated and disseminated market intelligence. It is more comprehensively operationalized through the use of market information when:

.. selecting target markets, designing and offering product/services that cater to their current and anticipated needs, and producing, distributing, and promoting the products in a way that elicits favourable end-customer response. Virtually all departments - not just marketing - participate in responding to market trends in a market-oriented company. (Kohli and Jaworski 1990:6)

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<sup>1</sup> To illustrate how dissemination of information may work - and can be implemented, Cray Research, USA, recruits employees in all functions on their skills of understanding and communicating with customers and people in all functions within the company, in addition to their functional skills.

Again, they argue that virtually all of the organization's activities, including planning and strategy development, should take market information into account in advance. Consequently, market behavior (i.e., the market strategy and the four p's) are also part of these activities.

Assuming that there are many shades of grey, Kohli and Jaworski (1990:6) approach a market orientation as a continuous rather than a dichotomous either-or construct. As a concluding remark, Kohli and Jaworski (1990:16) argue that the organization should have consistency at 'the level of market orientation' for each of the dimensions, and they provide an example to illustrate maladaptation among the dimensions: 'The quality of market orientation itself may be suspect or the quality of execution of marketing programs designed in response to the intelligence may be poor'. Therefore, they assume that inefficient market orientation can be a function of too low quality of a firm's market orientation (e.g., collecting too much information without having any clear data demand or ability to make a comprehensive analysis and interpretation of the data). Consequently, according to Kohli and Jaworski, inconsistency among the dimensions is inefficient.

### **2.1.2 The market orientation conceptualization of Narver and Slater**

Narver and Slater (1990) provided the second of the two main research contributions on the market orientation concept. The purpose of their study was to explore the effect of market orientation on business profitability. As part of the study they developed a conceptualization of market orientation (simultaneously with Kohli and Jaworski).

Narver and Slater emphasize the linkage between market orientation and business performance when they conceptualize market orientation. Consequently, they argue that market orientation (as similar to the marketing concept) is an important factor in the creation of superior business performance. Particularly, they argue that sustainable competitive advantage is the main benefit of market orientation, where: "a market oriented business continuously examines these alternative sources of SCA [sustainable competitive advantage] to see how it can be most effective in creating sustainable superior value for its present and future target buyers" (Narver and Slater 1990:21)

Their definition of market orientation is based on what the organization has to do in order to create a sustainable competitive advantage (in the market place). Consequently, Narver and Slater (1990:20-21) provide the following definition of market orientation:

Market orientation is the organization culture that most effectively and efficiently creates the necessary behaviors for the creation of superior value for buyers and, thus, continuous superior performance for the business. (Narver and Slater 1990:21)

This definition relies on the organization members' norms and values, and the degree to which they are in favour of creating superior value for buyers. Surprisingly, they are not using the culture approach in their further operationalization (see Narver, Jacobson and Slater 1993). Instead, Narver and Slater (1990:21) develop the following operationalization of the market orientation concept:

..market orientation consists of three behavioral components - customer orientation, competitor orientation, and interfunctional coordination - and two decision criteria - long-term focus and profitability. Customer orientation and competitor orientation include all of the activities involved in acquiring information about the buyers and competitors in the target market and disseminating it throughout the business(es). The third hypothesized behavioral component, interfunctional coordination, is based on the customer and competitor information and comprises the business's coordinated efforts, typically involving more than the marketing department, to create superior value for the buyer. In sum, the three hypothesized behavioral components of a market orientation comprehend the activities of market information acquisition and dissemination and the coordinated creation of customer value. (Narver and Slater 1990:21)

In contrast to Kohli and Jaworski (1990), Narver and Slater focus more explicitly on the *scope* of market orientation (in addition to its *nature*). An additional contrast is the two decision criteria included in the concept. There are five dimensions to the Narver and Slater definition. The first dimension, *customer orientation*, which is argued to be the sufficient understanding of the firm's target buyers to be able to create superior value for them continuously. A customer orientation requires the understanding of the buyer's entire value chain, not only as it is today but also as it will change over time (Narver and Slater 1990:21). In many ways this part of the definition is the core of the marketing concept, that is, the customer understanding (Houston 1986), and the organization's acquisition of information about the buyer issues is central to it.

The second behavioral dimension, *competitor orientation*, is the seller's understanding of the strengths and weaknesses and long-term capabilities and strategies of both the current and the potential key competitors (Narver and Slater 1990:21-22). Relying on Levitt's (1960) market myopia, Narver and Slater (1990:22) argue that "the analysis of principal current and potential competitors must include the entire set of technologies capable of satisfying the current and expected needs of the seller's target buyers". Since the assumption is that the customers will choose the best (customized) product in the market, it is important for the organization to benchmark its 'market orientation' and to continuously compare itself with competitors' market behavior. Consistent with Day and Wensley (1988), they argue that a market oriented organization should balance its competitor orientation and customer orientation:

Managers cope with the vast amounts of this rapidly changing and often conflicting market information through the processes of selective attention and simplification. These processes often lead to adoption of either a customer- or competitor-focused market perspective, determined by the manager's perception of the relative importance of customer or competitor analysis to a business's ability to create and sustain superior value for customer. ... It is of course possible that focusing primarily on either customers or competitors could lead to a partial and biased picture of reality. (Slater and Narver 1994:48)

The third dimension of market orientation is *interfunctional coordination*. They argue that a market orientation requires "an alignment of the functional areas' incentives and the creation of interfunctional dependency so that each area perceives its own advantage in cooperating closely with others" (Narver and Slater 1990:22). The attention toward the marketing discipline's role within the company implies that in developing effective interfunctional coordination, marketing or any other advocate department or function must be highly sensitive and responsive to the perceptions and needs of all other departments and functions in the company (Narver and Slater 1990:22). So doing, the firm's (whole) value chain is consistently directed toward the customers and competitors<sup>2</sup>.

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<sup>2</sup>Hunt and Morgan (1995:11) criticize the use of interfunctional coordination as part of the definition. They argue that "though it is a factor that can contribute to implementing successfully a market orientation, such implementation should not appear in a concept's definition". Implementation of any concept should be separated from the concept being implemented to distinguish between potential antecedents of (the implementation of) the concept and the concept itself.

Finally, the long-term focus and profitability focus are perceived as common factors of the three behavioral dimensions. Consequently, they are taking into account an analytical decision-making idea, where assessments of the ends associated with each of the means are part of a firm's decision process (see e.g., Simon 1964). As stated by Kotler (1994), market orientation implies profitability assessments to direct the firm's market behavior toward the most revenue generating treatments. To overcome the problem that market activities can be costly, a market oriented firm should consider the impact of market activities on profitability in the short run as well as in the long run. Narver and Slater include long-term focus as related to market orientation:

For long-term survival in the presence of competition, a business cannot avoid a long-run perspective. To prevent its competitors from overcoming whatever buyer-value superiority it has created, a business must constantly discover and implement additional value for its customers, which necessitates a range of appropriate tactics and investments. (Narver and Slater 1990:22)

In recent studies by Narver, Jacobson and Slater (1993) and Slater and Narver (1994), market orientation has been limited to the three behavioral components: customer orientation, competitor orientation, and interfunctional coordination. Long-term focus and profitability were instead viewed as a consequence of market orientation, rather than included in the concept.

### **2.1.3 Other definitions and operationalizations**

The research contributions of Kohli and Jaworski (1990) and Narver and Slater (1990) on the concept of market orientation have been influential within the field of market orientation. However, there are other definitions of market orientation (Ruerkert 1992; Pelham 1993). These definitions are closely associated with those described in the previous chapters. For example, Ruerkert (1992:228) defines market orientation as "the degree to which the business unit (1) obtains and uses information from customers; (2) develops a strategy which will meet customer needs; and (3) implements that strategy by being responsive to customers needs and wants". The definition by Ruerkert is close to the one by Kohli and Jaworski, and in particular Jaworski and Kohli's (1993:66) operationalization for

the empirical study where the response dimension was divided into two sub dimensions: (a) response design and (b) response implementation. The definition by Ruekert, however, might provide less information regarding the competitors' role in market orientation (which is important to both Kohli and Jaworski and Narver and Slater).

The other definition is from Pelham's (1993) study. He defines market orientation along three dimensions: (1) customer understanding orientation, (2) customer satisfaction orientation, and (3) competitive orientation. Although having different labels, the definition and operationalization is based on Narver and Slater (1990). The differences between the definitions are due to the factor structure of the data in Pelham's study which was used to define the construct of market orientation. Other studies use either the definition and operationalization of Narver and Slater (Pleshko 1993; Deshpandé, Farley and Webster 1993; Greenley 1995a;b) or of Kohli and Jaworski (Wood and Bhuiyan 1993; Diamantopoulos and Hart 1993; Selnes, Kohli and Jaworski 1998).

So far, the different market orientation definitions and operationalizations have been presented. To develop an understanding of market orientation and an accompanying definition and operationalization for this study, an analysis of the construct will be made. Accordingly, such an analysis will be important to develop a definition for this study.

## **2.2 AN ANALYSIS OF THE CONCEPTUALIZATION OF MARKET ORIENTATION**

In chapter 2.1 market orientation was outlined to be information generation, dissemination, and responsiveness to markets, where market was consisting of mainly competitors and customers. However, the different definitions and operationalizations of the market orientation construct have both overlapping and unique aspects. To assess what market orientation most efficiently could be defined as, the construct has to be analyzed using some construct validity criteria. A main task in conceptualizing a theoretical construct is to analyze the different aspects of its conceptualization to assess and secure the validity of the market orientation construct. As Cook and Campbell (1979:83) have argued, the clarity of independent constructs is crucial in theory development and theory testing. Defining market orientation appropriately, it is more plausible that the effects that can be found empirically really can be attributed to market orientation. The chapter starts with an argumentation for the framework of the concept analysis. Accordingly, the five criteria are applied for the analysis of market orientation.

### **2.2.1 A framework for a concept analysis**

Concepts can be viewed as "abstracted forms and do not reflect objects in their entirety but comprehend only a few aspects of objects" (Zaltman, Pinson and Angelmar 1973:23). Thus, a concept is a thought rather than an actual (tangible) thing. The analysis framework provided by Zaltman, Pinson and Angelmar (1973) consist of four notions of a concept: Intension, denotation, connotation, and extension. These four notions form a concept's boundaries.

A concept's *intension* is defined as "those aspects of the objects that are comprehended in the concept" (p. 23). In other words, intension deals with the set of attributes and features belonging to the concept. Furthermore, intension is a result of the process of abstraction:



When we consider the common form of various things, or various events, and call it by a name that does not suggest any particular thing or event, or commit us to any mental picture .. we are consciously, deliberately abstracting the form from all things which have it. (Langer in Zaltman, Pinson and Angelmar 1973:28)

The second notion, the *denotation* of a concept, "is the class of objects and events embodying the properties of a concept" (Zaltman, Pinson and Angelmar 1973:32). Denotation is an important aspect of a construct since the identification of the owner of the construct should be important to make a precise definition and understanding of market orientation. The third notion, *connotation*, is "all the properties that are common to the elements of the denotation" (p. 32). Connotation is, therefore, the overlap between denotation and intension. In other words, the set of attributes and features belonging to any one thing which a particular term is correctly applied to constitute the concept's connotation. Connotation can be useful in order to find inference limitations and/or systematic differences, e.g. creation of typologies. Although connotation is implicitly a necessary part of the discussion of intension and denotation, the connotation aspect goes beyond the purpose of this study. Finally, the *extension* of a concept is the objects that belong to the concept's denotation. Extension of the market orientation concept also goes beyond the purpose of this study.

Intension and denotation can be used to assess the concepts of market orientation found in the literature. Although these notions are useful for general analysis (see Troye and Henjesand 1992), they do not provide a fine-grained tool because of the lack of further operationalization. Therefore, additional criteria for the analysis of the concept's intension and denotation will be adopted from Venkatraman (1989). These criteria were developed for analysis of the strategic orientation concept which is relevant to the analysis of the concept of market orientation (Lines 1992; Narver and Slater 1990).

Venkatraman (1989:945) raises four questions regarding a concept's boundaries. The first question is "should the definition distinguish between means and ends?". This is labelled the 'scope' and deals with whether the construct of market orientation should include its consequences in its definition. The second question is "should the construct be defined at a particular level of the organizational hierarchy or should it be level-free?", and is labelled 'hierarchical level'. The third question is "should the domain be restricted to some parts (i.e., some functional focus) or cover a broader perspective?", and is labelled 'domain'. The final question is: "is the distinction between intended and realized strategies relevant for

conceptualizing and measuring this construct?", and is labelled 'intentions versus realizations'.

Another boundary issue is the discriminance of market orientation to related constructs (Hunt and Morgan 1995). According to Zaltman, Pinson, and Angelmar (1973:44), discriminant validity is "the extent to which a concept differs from other concepts". Achieving discriminant validity is important to avoid redundancy of recently defined constructs, like market orientation. Particularly, a construct should be significantly different, conceptually as well as empirically, from other constructs (Singh 1991). It would be a waste to develop a theory of market orientation if the same phenomenon and accompanying theory is covered by other concepts (e.g., like the often troublesome difference, or lack thereof, among perceived quality, customer satisfaction, and attitude toward the product). An analysis of the discriminance and (non-) redundancy of the focal construct should therefore be valuable to secure whether market orientation is a construct different from other constructs.

The discussion above can be summarized in Table 2.1. A construct has two important aspects which will be addressed in this study: the intension and denotation of market orientation. These two aspects can be divided into five subdimensions. *First*, the scope of market orientation addresses whether the means-end and/or means are part of the construct's intension. *Second*, the domain of market orientation deals with the term market of market orientation's intension. *Third*, the intended versus the realized market orientation corresponds with the construct's intension. *Fourth*, the discussion of the hierarchical level deals with which objects that can "own" the traits as described in the intension aspects, that is, the denotation of market orientation. *Fifth*, the construct's discriminant validity vis-à-vis other constructs is analyzed, which involve both the construct's intension and denotation. The next five subchapters analyze the conceptualizations of market orientation found in the literature using the five criteria presented in Chapter 2.2.1.

**TABLE 2.1**  
**Main dimensions and subdimensions for the concept analysis**

<b>Main Dimensions</b>	<b>Intension of the concept</b>	<b>Denotation of the concept</b>
<b>Subdimensions</b>		
<b>Scope</b>	Should the definition of market orientation distinguish between means and ends?	
<b>Hierarchical level</b>		Should the construct of market orientation be defined at a particular level of the organizational hierarchy or should it be level-free?
<b>Domain</b>	Should the domain of market orientation be restricted to some parts of areas of organizational attention?	
<b>Intention versus realization</b>	Is the distinction between intended and realized market orientation relevant for conceptualizing the construct?	
<b>Discriminance to other constructs</b>	Is market orientation different from other related construct?	Is market orientation at a different level of the organizational hierarchy than other related constructs?

### **2.2.2 The scope of the market orientation concept**

The scope of a concept is to a great extent dependent upon whether it is considered a 'means' to an 'end', or both a 'means' and an 'end' concept (see Venkatraman 1989:946). A means concept is defined independently of its consequences, and a means-and-ends concept includes the consequences. As an example, within the literature of business strategy formulation there has been disagreement over whether business goals formulation and strategy formation should be viewed as intertwined (i.e., means and ends interlinked), or separated (Venkatraman 1989:946). The parallel question regarding market orientation is to

what extent is it appropriate to adopt an isomorphic scope for the concept (i.e., market orientation as both means and ends), or to adopt a more restrictive scope (i.e., market orientation solely as means). The latter is appropriate for an examination of relationships between market orientation and its effects (on goals) in different contexts. An isomorphic definition of the construct makes it logically impossible to examine those relationships. In the next sections the current definitions of market orientation are analyzed in terms of their scope.

Narver and Slater (1990) hold that "profitability, though conceptually closely related to market orientation, is appropriately perceived as an objective of a business", and therefore they include it as a part of market orientation. This conception is consistent with the definition presented by Deshpandé, Farley and Webster (1993). Consequently, market orientation is viewed as both a means for profitability and, thus, a purpose for the organization *per se*. Strictly speaking, an organization is not market oriented if it is not achieving its goals with its market activities.

Contrary to Narver and Slater (1990), Kohli and Jaworski (1990) define market orientation as a means and business performance as something outside the concept, that is, a consequence of market orientation rather than a part of it. This is also consistent with the view of Pelham (1993) and Ruekert (1992). Furthermore, Kohli and Jaworski (1990:3) also made the (rhetorical) argument that "viewing profitability as a component of a market orientation is like saying that the goal of human life is eating". Recently, Narver and Slater modified their definition. Their current definition captures the three behavioral dimensions and does not include the long-term focus and profitability (Narver, Jacobson and Slater 1993; Slater and Narver 1994). This scope makes it possible to investigate the nature of linkages between goals (i.e. effects) and market orientation. Moreover, the literature's emphasis on equifinality (e.g. Porter 1980) does provide the possibility of testing alternative combinations of orientations (and conditions) to achieve the same ends.

The literature provides two different approaches to market orientation. One definition is a means *and* an end definition (Narver and Slater 1990) and the other is a means definition (Kohli and Jaworski 1990). A means and an end definition does not enable a study of the effects of market orientation since (some of) the effects are included in the construct. In contrast, a strict means definition of market orientation makes possible the study of potential consequences of the construct and avoids the tautology associated with the other definition. Accordingly, for the study of possible effects of market orientation a means definition is the

most efficient. For the purpose of this study a "means" scope of the market orientation concept will be used.

### **2.2.3 The hierarchical level associated with the market orientation concept**

The strategic business unit (SBU) represents the most frequently used hierarchical level of analysis for studies of market orientation (Kohli and Jaworski 1990; Jaworski and Kohli 1993; Narver and Slater 1990; Narver, Jacobson and Slater 1993; Slater and Narver 1994; Shapiro 1988; Ruckert 1992; Pelham 1993; Greenley 1995a;b; Deshpandé, Farley and Webster 1993). Strategy at the business level is concerned with the following question "how do we compete effectively in each of our chosen product-market segment?" (Venkatraman 1989:946). As emphasized by Kotler (1994) and Porter (1980), among others, an important issue at the business level is how the company develops its strategy matching environmental opportunities and competitive threats. Business strategy at the SBU level is based on a detailed and careful analysis of customers and competitors and of the company's skills and resources for competing in the specific market segments (Day and Wensley 1988). The outcomes of the planning process are market segmentation analyses, market targeting decisions, and positioning and marketing-mix in the target segments (Webster 1992). The marketing literature (e.g., Kotler 1994) has its primary focus on business strategy and marketing associated with the strategic business unit. According to Webster (1992:11), "at the SBU level, the distinction between marketing and strategic planning can become blurred; in some firms these functions are likely to be performed by the same people". SBU constitutes the lowest level of the organization that coordinates the different departments in creating and delivering value to customers. Since the denotation of market orientation is argued to be the (entire) organization, lower levels of an organization (e.g., functions and departments) are not relevant to deal with (Shapiro 1988; Kohli and Jaworski 1990; Narver and Slater 1990). The rationale for this restriction of the construct's denotation is that all parts of an organization contribute to value creation in the various parts and phases of the firm's value chain. The way these functions and departments behave can, in sum, express the firm's market orientation. Moreover, the customers will mostly experience the outcome of all of the internal processes. Therefore, the way these internal processes are managed and implemented

will affect the firm's offering, and consequently, the firm's (overall) market orientation. In the literature it is emphasized that market orientation is an attempt to integrate key functions toward joint market effort, and more than just a single department (or group and individual/person) issue (Shapiro 1988; Webster 1992; Narver and Slater 1990; Kohli and Jaworski 1990; Kohli, Jaworski and Kumar 1993; Anderson 1982). Although there have been studies of market orientation associated with functional activities, e.g., market oriented selling (e.g. the SOCO-scale of Siguaw, Brown and Widing 1994), and market oriented product development (e.g., Cooper 1994; Urban and Hauser 1993; Moorman 1995) these approaches only deal with parts of the concept of market orientation.

Additionally, market orientation can also be related to the corporate level of an organization. At the corporate level market orientation can be related to three aspects (Webster 1992:11). (1) Market analyses and assessments of the organization's businesses and its use in the company's policy development. (2) As emphasized by Anderson (1982:23), marketing "considerations may not have any significant impact on strategic plans unless marketers adopt a strong advocacy position within the firm". To advocate the utilization of market information and knowledge and to guide the management of the company and its business units can affect the degree at which the decisions are made with a market focus. (3) Eventually, the pattern of linkages among the businesses and the scope of the value chain are important at the corporate level (Venkatraman 1989:946). The match between the portfolio of resources and the market should be of interest to focus on. Particularly, the resources' value are for most cases market-based (Barney 1994). As firms become more diversified, and/or horizontally and vertically integrated, the relevance and importance of the corporate level for marketers should increase (Webster 1992). Although, the marketing literature has not emphasized the corporate level in theory development, the complexity associated with the understanding of an organization's orientation in multiple product-market segments is high. The reason for this complexity is the presence of different forms and degrees of market orientation in the different product/market segments. So far the literature has not provided any market orientation conceptualization at the corporate level.

The market orientation construct (and its theories) can, from the discussion above, be assigned to two hierarchical levels: the SBU and the corporate level. The literature has suggested that the SBU level is appropriate, and the empirical studies of market orientation are conducted at the SBU level. The corporate level has not been included in any studies of the effects (and the antecedents) of market orientation. Although the corporate level can be of

significant importance and relevance for the study of the effects of market orientation, much work has to be done to develop the content of the market orientation construct and its effects at this level. Multi-level constructs and theories should be carefully explored to identify appropriate operationalizations for each hierarchical level. For further research, adoption and adaptation of the construct and theories of market orientation should be considered to be applied at the corporate level. For the purpose of this study, to continue to explore the effects of market orientation at the SBU level will be the most incremental (and less hazardous) choice.

## **2.2.4 The domain of the market orientation concept**

This chapter addresses the environmental focus of market orientation's intension, i.e., the domain of the market orientation concept. Regarding market orientation, the main question is which environmental segments (or stakeholders) should be included. All of the conceptual and empirical studies of market orientation hold customers (current and potential customers' current and future needs) as the most central focus (Narver and Slater 1990; Narver, Jacobson and Slater 1993; Kohli and Jaworski 1990; Deshpandé, Farley and Webster 1993; Ruekert 1992; Pelham 1992; Greenley 1995b). Furthermore, competitor orientation is also commonly included. Only one of the contributions (Deshpandé, Farley and Webster 1993:27) excludes competitors from market orientation (and thus, they label their concept as customer orientation). They see customer and market orientations as being synonymous and argue that a customer focus is sufficient as the core of market orientation. The arguments for including the customers as the sole part of the market orientation definition are (1) the importance to continuously discover unmet needs of the customers and the implementation of this information in the firm's strategy and behavior, and (2) that the competitor orientation can be almost antithetical to a customer orientation when the focus is mostly on the strengths of a competitor rather than on the customer, and then, the average score on a firm's market orientation might represent a competitor orientation as well as a customer orientation (Deshpandé, Farley and Webster 1993:27). Although competitor orientation and other domains are not ignored, they define market orientation as "the set of beliefs that puts the customer's interest first, while not excluding those of all other stakeholders such as owners,

managers, and employees, in order to develop a long-term profitable enterprise" (Deshpandé, Farley and Webster 1993:27). The customers can further be defined as end-users and intermediaries, since both of these groups go through a buying decision-making process to determine which offering that will satisfy the party's need most efficiently (Jaworski and Kohli 1993). Eventually, since the market is dynamic, both present and future (potential) customers and accompanying needs should be part of the customer domain (Kohli and Jaworski 1990).

While customer orientation is important, competitive advantage is an advantage only in a relative sense, that is, compared to the firm's competitors. A firm has to balance customer focus with competitor focus so the risk of myopia due to selective attention and information simplification is minimized (Day and Wensley 1988:16; Day 1990:126-7). Since a customer will find himself in a situation of choice among several competitors' offerings, a company has to monitor competitors and possible entrants to assess the attractiveness of their own offering. Not surprisingly, the battle of the market is proposed to be through "delivering the desired satisfactions more effectively and efficiently than competitors" (Kotler 1994). Consequently, the firm needs information and knowledge about its competitors. Moreover, monitoring competitors can also be a source for ideas of improving the firm's offering (von Hippel 1988). The inclusion of competitor orientation in the market orientation construct is supported by Slater and Narver's (1994) study of firms' emphasis on customer analysis relative to competitor analysis, in which they found that an exclusive customer orientation is not sufficient. Consequently, a market-based strategy should be perceived as balancing customer inputs with direct competitor comparisons.

Kohli and Jaworski (1990:3) define market orientation to also include "consideration of exogenous market factors (e.g., competition, regulations) that affect customer needs and preferences". Their exogenous factors include technology and 'other environmental forces'. Finally, they argue that "environmental scanning activities are subsumed under market intelligence generating" (Kohli and Jaworski 1990:4). However, in the operationalization there was only a modest attempt made to capture forces beyond customers and competitors (Jaworski and Kohli 1993; Kohli, Jaworski and Kumar 1993). The question of the domain of market orientation is related to what degree environmental segments or stakeholders should be included. According to Hambrick (1982:161) four environmental sectors are of particular importance to a firm: the entrepreneurial, engineering, administrative, and regulatory sector. Out of this set of sectors, the competitive forces, i.e., suppliers, potential entrants, substitutes,



industry competitors, and buyers, are proposed in the marketing literature (and some of the industrial economics based business strategy literature) to have a particular strong impact on a firm's competitive advantage (Porter 1980; Day 1990). According to the marketing literature, a market oriented company should take all these environmental conditions into account (Kotler 1994). It is evident from research in business strategy that the customers are but one of the environmental sectors to which a company has to attend (Hambrick 1982; Dickson 1992). Some researchers (Lines and Grønhaug 1993; Söderlund 1993a) emphasize that top managers also have to adapt a company's processes to demands from regulatory agents, competitors' behaviors, liabilities of suppliers, technological development which occur outside the company's task environment. Consequently, Lines and Grønhaug (1993) propose that market orientation can be achieved at the cost of neglecting other environmental sectors, and, therefore, the result might be inferior performance for the firm. This primarily occurs because of limitations on managers' cognition and decision-making resources (see Simon 1991). Additionally, there are limitations on organizational resources (Pfeffer and Salancik 1978) that limit the potential advantage of market orientation (Lines and Grønhaug 1993).

Despite the influence of all environmental segments, some of the segments are believed to be more central than others. The most common scarce resource of a firm is the revenue from its customers (Kotler 1994; Anderson 1982). Sooner or later the supply will exceed the demand of the most profitable market segments, and then, the ability to meet the customers' need better than the competitors will be critical (Dickson 1992:70). Therefore, customers and competitors are perceived from a resource dependence perspective to be the most important environmental segments (Anderson 1982), and thus, customer and competitor orientations should be extremely important. This proposition is supported in two previous empirical studies. In a study of managers' environmental orientation by Lines (1992:174) the findings support "the arguments that customers constitute the most important environmental segment surrounding business firms". Furthermore, in a similar study by Söderlund (1993a:297) the conclusion was that a limited set of environmental factors - mainly customer demand and competition - constitute most of the environment's impact on the firm and its decision making processes. Consequently, a "narrow" environmental view can capture a significant part of a company's domain. These findings are also consistent with the current perception of the scope of market orientation (Slater and Narver 1994; Narver and Slater

1990; Jaworski and Kohli 1993). In this study the domain of market orientation will be limited to the orientation toward customers and competitors.

### **2.2.5 Intention versus realization of market orientation**

The fourth aspect of market orientation is the phenomenon of intended versus realized orientation. As suggested by Dreher (1995), the different contributions to the market orientation literature may be classified both as philosophy and as behavior. The first orientation perspective (orientation as philosophy) can be interpreted as similar to Venkatraman's intention perspective and the latter (orientation as behavior) as realized orientation. The purpose of the chapter is to determine whether market orientation best can be applied on market oriented values, beliefs, attitudes, and organizational culture or on market oriented behavior, where the latter is a matter of assigning behavior to a particular orientation. Market orientation as intention & philosophy will be discussed first and then market orientation as realization & behavior. Finally, an assessment will be made of the two perspectives.

A market oriented organization has certain capabilities for perceiving and reacting to market signals. Persons within an organization view the surrounding world based on their own beliefs, norms, and values which are proposed to affect their decisions and behavior (Weick 1979; Hambrick and Mason 1984; Deshpandé, Farley and Webster 1993). Consequently, due to bounded rationality, the organization and its members have (1) a limited field of vision, (2) selective perception, and (3) a particular way of making (market signals) interpretations based on their cognitive bases and values (Hambrick and Mason 1984; Lines 1992). Market orientation as philosophy and intention can, therefore, be relevant in order to explain the firm's market behavior. Consequently, cognitive bases and values (and organization culture) toward market orientation are drivers for market oriented activities. Thus, market orientation may be viewed as the degree of the change and maintenance of the organization's culture and its members' attitudes and cognitions related to the marketing concept (Narver and Slater 1990; Deshpandé, Farley and Webster 1993).

In contrast to the intention approach, there is the realization approach. Within this approach the focus is on the decision makers' and the organizations' behavior (Dreher 1995). The definition of market orientation provided by Shapiro (1988:120-122) contains three behavior elements which are that (1) information on all important buying influences

permutations of every corporate function, (2) strategic and tactical decisions are made interfunctionally and interdivisionally, and (3) divisions and functions make well-coordinated decisions and execute them with a sense of commitment. This approach is also found in the study of Jaworski and Kohli (1993) which defined market orientation in a similar way. They argue that market should be reflected in the activities and behaviors of an organization. Therefore, a market oriented organization is one whose actions are consistent with the marketing concept (Kohli and Jaworski 1990:1).

Bringing the two perspectives on the orientation concept together, can provide a useful framework for understanding the market orientation literature. According to the (unidimensionalist approach to the) attitude literature, attitude entails behavior (Lutz 1991). Thus, a company that is strongly convinced about the importance of being market oriented will (all things being equal) be more market oriented in its activities and behavior. If one assumes a similar association between an organization's philosophy & intention and behavior & realization, then the organization's behavior should be a function of the organization's philosophy. However, the behavior can be idiosyncratic in the sense that the same behavior may reflect different business philosophies. As Deshpandé, Farley and Webster (1993:27) argue "a simple focus on information about the needs of actual and potential customers is inadequate without consideration of the more deeply rooted set of values and beliefs that are likely to consistently reinforce such a customer focus and pervade the organization".

However, as discussed by several researchers there are often significant gaps between intention (e.g., the strategy plan), and the realized orientation and strategy (e.g., "pattern in a stream of decisions") (Mintzberg 1978), and an organization's espoused values and theory-in-use (Argyris and Schön 1978). Studies of the strength of the attitude-behavior relationship indicate that many factors affect the relationship between attitudes and behavior (see Lutz 1991; Fazio and Zanna 1978). Therefore, the consistency between philosophy and behavior can be difficult to assess. For example, Fishbein (1967) proposes that subjective norms will affect a person's behavior in addition to their attitude. Furthermore, Fazio and Zanna (1978) propose that "the more an attitude was based upon direct behavioral experience, the more likely it was that the attitude predicted subsequent behavior". Therefore, it is less relevant to use an attitude-based (or culture-based) market orientation concept as a "predictor" than to use a behavior-based market orientation concept.

In the strategy literature, many researchers prefer to assess realized strategies rather than proposed or intended strategies (see Venkatraman 1989). As argued by Mintzberg and

Waters (1982:465): "Conceiving strategy in terms of intentions means restricting research to the study of the perceptions of what those who, it is believed, make strategy intend to. And that kind of research - of intentions devoid of behavior - is simply not very interesting or productive". This is also consistent with Shapiro's (1988) point that most companies will probably argue that they are highly market oriented, but that the variance in the "real" market orientation is substantial. Regarding the gap between philosophy and behavior, the most relevant perspective is the real(ized) orientation since it influences, and becomes consistent with the actions of the company. Thus, the view of market orientation of the firm that will be adopted for this research is based on behavior.

### **2.2.6 The discriminant validity of the market orientation construct**

In this section the interface of market orientation with other constructs will be discussed. Although market orientation can be similar and close to many different concepts or constructs<sup>3</sup> (see Dickson 1992) it may be adequate to focus this discussion on concepts that can be viewed as overlapping and interchangeable, and therefore, cause redundancy of the market orientation construct (Singh 1991). In many situations, market orientation is argued to be very closely associated with the marketing concept (Kohli and Jaworski 1990; Narver and Slater 1990) while it by others is argued to be something entirely different (Hunt and Morgan 1995). If market orientation is no more than the marketing concept, or the implementation of the marketing concept, then the role of market orientation is confusing and probably less valuable. Accordingly, the following analysis will be an attempt to explore the interface between the marketing concept and market orientation.

The concept of marketing has been described in a variety of ways (e.g., Houston 1986; McNamara 1972; Kotler and Levy 1969; Kotler 1972; Lawton and Parasuraman 1980). A broadly accepted definition of the marketing concept is the current American Marketing Association (AMA) definition of marketing: "The process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods, and services to create

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<sup>3</sup> For example, the definition of market orientation is close to Dickson's (1992:79) definition of market planning. He defines it as "procedures for gathering information, using knowledge, being creative, screening ideas, and implementing".

exchanges that satisfy individual and organizational objectives" (American Marketing Association 1985). The AMA-definition of marketing is a statement of both the ends of marketing, that is, exchanges that satisfy buyer and seller objectives and the means that are available within marketing (i.e., "conception", pricing, promotion, and distribution). Finally, the definition addresses the issue of the domain of marketing (i.e., ideas, goods, and services, see Kotler 1972; Kotler and Levy 1969; Luck 1969 for a discussion of the domain of marketing). This definition includes the objectives of marketing, and thus, it does not contain any specification of whether marketing is present for a firm independently of the level of customer satisfaction or seller's profit. Contrary to this 'means-and-end' approach to the marketing concept, Houston (1986:85) argues for the following definition of the content of the marketing concept:

The marketing concept states that an entity achieves its own exchange determined goals most efficiently through a thorough understanding of potential exchange partners and their needs and wants, through a thorough understanding of the cost associated with satisfying those needs and wants, and then designing, producing, and offering products in light of this understanding.

The core of the marketing concept is that the organizations seek to serve needs of exchange partners with the "customer's satisfaction in mind" (Houston 1986:86). Although it can be difficult to elicit all sufficient information from the customers the marketing concept holds that the customer focus should be the superior attribute of the concept. Moreover, two controversies have been part of the discussion of the marketing concept. The first was regarding whether the marketing concept should be restricted to profit organizations (Lutz 1969) or should be valid and useful to all kinds of organizations, for example, not-for-profit organizations (Kotler and Levy 1969). The latter view has got most acceptance (Hunt 1991). The other was the recent inclusion of, and focus on, societal and environmental attention and responsibility as part of the concept (Kotler 1972; Kotler 1994).

The interface between the marketing concept and market orientation has been discussed in some of the studies of market orientation. In the discussion by Narver and Slater (1990:20-22) market orientation is described (at least through the references used in the text) as being close to the marketing concept. Both Kohli and Jaworski (1990:1), Ruckert (1992) and Deshpandé, Farley and Webster (1993:27) argue that market orientation can be viewed as the implementation of the marketing concept. In contrast, Hunt and Morgan (1995:11) emphasize that market orientation cannot be the implementation of the marketing concept

since the latter has a single focus on customers. Instead, Hunt and Morgan perceive market orientation as supplementary to the marketing concept. Consequently, the customer orientation of Narver and Slater (1990) and Deshpandé, Farley and Webster is close to the core of the marketing concept, while market orientation has a broader scope. In addition to the conceptual difference, the impact of customer orientation and market orientation (i.e., customer orientation + competitor orientation) seems to be different with respect to business performance (Slater and Narver 1994; Greenley 1995b). Additionally, the marketing concept is highly associated with the marketing function (Bennett and Cooper 1979; Levitt 1960; Kotler 1994) while market orientation is located at the business level. This difference is important since the term marketing is not equal to market. While marketing is a function, the market orientation is cross-functional. For example, Kotler (1994:25-27) provides some ideas how the marketing department's role becomes the most important and central one in customer oriented firms (i.e., firms who have adopted the marketing concept). A thoroughly adopted marketing concept might entail "the customer as the controlling function and marketing as the integrative function" (Kotler 1994:27). Marketing as the market mediator and organizer is not found to be consistent with the conceptualization of the market orientation. Therefore, market orientation should be considered to be different from the marketing concept. Consequently, market orientation should be viewed as non-redundant with marketing and the marketing concept at the conceptual level.

## 2.3 CONCLUSION

This chapter has presented a review of the literature on the market orientation concept. This review can be summarized in Table 2.2. The table contains the definitions of market orientation, and the assessment of the different conceptualizations' scope of means versus ends, hierarchical level, domain of focus, intentions versus realizations, and discriminant validity. As shown in Table 2.2, there are some differences among the different contributions. However, compared to other fields of marketing, e.g., the quality concept (Troye and Henjesand 1992), and the customer satisfaction concept (Churchill 1979), these differences are relatively modest. Consequently, this degree of similarity among the definitions can indicate some degree of consensus in the literature with respect to what market orientation should be defined as. As a result of the review of the literature, the definition of market orientation adapted to this research will have the traits as argued for in this chapter to make incremental improvements which are recommended by both Jaworski, Kohli and Kumar (1993:473) and Narver, Jacobson and Slater (1993:17).

**TABLE 2.2**  
**Summary of conceptualizations found in studies of market orientation**

<b>Theoretical contributions</b>	<b>Definition of market orientation</b>	<b>Scope of means versus ends</b>	<b>Hierarchical level</b>	<b>Domain of focus</b>	<b>Intentions versus realizations</b>	<b>Discriminant validity of market orientation</b>
<b>Kohli and Jaworski (1990)</b>	Market orientation is the organizationwide generation of market intelligence pertaining to current and future customer needs, dissemination of the intelligence across departments, and organizationwide responsiveness to it	A "means" definition	Strategic Business Unit (SBU)	The domain consists of (1) current and potential customers; (2) current and potential competitors; (3) distributors; and (4) other environmental factors affecting the demand.	Market orientation as behavior and realized behavior: "a market oriented organization is one whose actions are consistent with the marketing concept". In particular, behavior is to a great extent information processing behavior.	Market orientation is viewed as the implementation of the marketing concept.
<b>Narver and Slater (1990)</b>	..market orientation consists of three behavioral components - customer orientation, competitor orientation, and interfunctional coordination - and two decision criteria - long-term focus and profitability.	Can be described as a "means and ends" definition	Strategic Business Unit (SBU)	The domain consists of (1) current and potential customers, and (2) current and potential competitors.	Market orientation as organizational culture, and, therefore, more intention-based concept: "the organization culture (i.e. culture and climate) that most effectively and efficiently creates the necessary behaviors for the creation of superior performance for the business".	Market orientation is viewed as close to the marketing concept.



<b>Narver, Slater and Jacobson (1993)</b>	Market orientation as consisting of three behavioral components: a customer orientation, a competitor orientation, and an interfunctional orientation	A "means" definition, since they excluded the long-term focus and profitability from the previous definition	Strategic Business Unit (SBU)	The domain consists of (1) current and potential customers, and (2) current and potential competitors.	See the cell above (Narver and Slater 1990)	See the cell above (Narver and Slater 1990)
<b>Deshpandé, Farley and Webster (1993)</b>	...the set of beliefs that puts the customer's interest first, while not excluding those of all other stakeholders such as owners, managers, and employees, in order to develop a long-term profitable enterprise	Can be described as a "means and ends" definition	Strategic Business Unit (SBU)	The domain consists solely of customers.	Market orientation as organizational culture, and, therefore, more intention-based concept: market orientation as philosophy can be viewed as one element of, but much more fundamental, corporate culture.	Market orientation is viewed as similar to, and based on, the marketing concept.
<b>Ruekert (1992)</b>	The degree to which the business unit (1) obtains and uses information from customers; (2) develops a strategy which will meet customer needs; and (3) implements that strategy by being responsive to customers needs and wants.	Can be described as a "means and ends" definition	Strategic Business Unit (SBU)	The domain consists solely of customers.	Market orientation as (strategic decision making) behavior and realized behavior.	Market orientation is the (guideline for the) implementation of the marketing concept.
<b>Greenley (1995a)</b>	see Narver and Slater (1990)	see Narver and Slater (1990)	see Narver and Slater (1990)	see Narver and Slater (1990)	see Narver and Slater (1990)	N/A

The following conclusion can be drawn. *First*, the concept applied in this study will have a 'means' definition. The definition will be purpose-free to allow the assessment of the effects of market orientation. *Second*, the definition will also be targeted to the business level, or to the strategic business unit. Consistent with most studies of market orientation this will view market orientation as a business concern rather than as a functional task. However, since market orientation may differ within the SBU as well as at the corporate level, it is appropriate to define the adequate product-market segment with the business' principal market (as in Jaworski and Kohli 1993). *Third*, the domain is specified as (1) current and potential customers' (both end-users and distributors') current and future adoption criteria<sup>4</sup>, and to (2) current and potential competitors' current and future behavior toward these customers. *Fourth*, realized orientation (rather than an intended orientation) will be used to capture the firm's actual behavior. This choice is consistent with Kohli and Jaworski (1990) that emphasize that market orientation should be view as a behavioral rather than as a philosophical phenomenon. In sum, these four choices contribute to make a unique definition and understanding of market orientation. The non-redundancy of market orientation, as discussed in Chapter 2.2.6, should thus, be achieved. Consistent with the discussion in Chapter 2.2 and Chapter 2.3., the Kohli and Jaworski (1990) definition of market orientation, with the explicit understanding of it outlined in this chapter, is the most appropriate starting point for this study. Thus, the following tentative definition of market orientation can be stated:

*Market orientation is the organizationwide generation of market intelligence associated with the principal served product-market, pertaining to current and future customers' current and future adoption criteria, and current and future competitors' current and future market behavior, together with the dissemination of the intelligence across departments, and organizationwide responsiveness to it.*

The next chapter considers to which extent market orientation, as discussed in this chapter, contributes to firm performance. Central to such a discussion is the question to which extent the definition presented here is sufficient to accomplish the requirements of being an effective learning capability for the firm to achieve and sustain competitive

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<sup>4</sup> The present definitions use the term 'needs' (see e.g., Kohli and Jaworski 1990; Narver and Slater 1990). However, the term 'adoption criteria' has a broader focus on the customer. Adoption criteria include needs, information processing, and the decision process of the customer.

advantage. The market orientation literature has not identified the capabilities of market orientation that continuously produce and exploit revised and accurate market knowledge, and in turn, leads to competitive advantage. Such capabilities are important to identify to contribute to the progress of knowledge about how organizations learn about markets and exploit such learning in their decisions.

# **MARKET ORIENTATION AS FIRM LEARNING CAPABILITIES**

*Distinctiveness in the product offering or low costs are tied directly to distinctiveness in the input - resources - used to produce the product, much as the quality and cost of boeuf bourguignonne depend on the particular ingredients used and the way in which they are mixed.  
(Kathleen R. Conner, 1991)*

This chapter serves as the foundation for the theory of the effects of market orientation that will be presented in Chapter 4. Chapter 3.1 contains the consideration of the need for a revision and extension of the market orientation concept tentatively defined in Chapter 2. This consideration is succeeded by viewing market orientation as firm learning capabilities. The capabilities of market orientation that may be a source to achieve and sustain competitive advantage (i.e., serve the role of strategic capabilities to the firm) are identified and assessed in Chapter 3.2. This chapter suggests four capabilities of market orientation: market orientation information system, market orientation domainwidth, market orientation means alteration, and market orientation tacitness. Chapter 3.3 continues with a theoretical consideration of each of the market orientation capabilities to give content to each capability and to elaborate on their contributions to sustained competitive advantage. Chapter 3.4 concludes the chapter.

## **3.1 DEFINING MARKET ORIENTATION AS FIRM LEARNING CAPABILITIES**

Chapter 3.1.1 provides an introduction to the theoretical foundation of this study with an analysis of the need for revision and extension of the market orientation concept. Chapter 3.1.2 continues with a consideration of market orientation as a firm capability. The capability approach is further elaborated in Chapter 3.1.3 where market orientation is defined as a market orientation learning capability.

### **3.1.1 The need for revision and extension of the market orientation concept**

Chapter 2 made effort to assess and synthesize the stock of accumulated knowledge regarding the market orientation construct. In short, market orientation was argued to be comprised of three core processes: organizationwide generation, dissemination and responsiveness to market information. The tentative definition provided in Chapter 2 was an attempt to develop an state-of-the-art definition based on the current conceptualizations found in the emerging theory of market orientation.

In spite of the review and assessment in Chapter 2, it is not clear to which degree the tentative definition captures all of the critical aspects of market orientation. It has been argued that the concept needs to be extended to capture additional crucial aspects for market orientation to become a source of competitive advantage for the firm for the following reasons.

First, the work on market orientation primarily captures the extent to which an organization engages in activities of market information generation, dissemination, and responsiveness. The quality of the market orientation activities is not necessarily equal to the extent to which they are performed (Jaworski and Kohli 1996). A firm can perform each of the core process activities of the market orientation construct, as defined in Chapter 2, in several ways with different means, costs, and outcomes. The three core processes may be loosely or tightly coupled (Kohli, Jaworski, and Kumar 1993; Moorman 1995). The activities may be conducted either smoothly and automatically or formally and sequentially. Accordingly, market orientation as information system is underdeveloped because there has been too little

attention to the integration part of market orientation (for an exception, see Sinkula 1994). Consequently, there is a need for the development of some kind of coordination mechanism of the three core processes of market orientation. Such a mechanism may explain the consideration and integration of the activities of the firm's market orientation, and thus, contribute to a better understanding and conceptualization of how the firm may effectively generate and exploit market information.

Second, market orientation lacks a defined domain of its market scope. Although the market orientation construct holds that information should be generated from current and potential customers, the market scope goes beyond these issues. Market scope deals with to which degree the organization gathers information in markets beyond those it does not currently operate in itself. Such information may be useful for the organization to become more competitive in its current market(s) or/and may lead the company to expand into new markets (Levitt 1960; Abell 1978). The customers may choose among a broad variety of alternatives (i.e., substitutes) that may provide the customer benefits, and they do so from different industries. As one industry changes other industries may be affected by such changes. As customers get familiar with new products and technologies the demand is also likely to change (Dickson 1992). It is expected that many firms become less competitive because they do not monitor external threats and opportunities outside their principally served market(s) (Levitt 1960; Hunt and Morgan 1995; Dickson 1996). The need for a mechanism of market orientation that prevents the firm from market myopia should be accounted for in the concept of market orientation.

Third, it is claimed that the current market orientation conceptualization does not imply the processes of revising, that is, assessing and changing, the organization's way of generating, disseminating and utilizing market information (Slater and Narver 1995; Jaworski and Kohli 1996). A mechanism for renewal and revision of the firm's market orientation activities is important to include in a definition of market orientation. Jaworski and Kohli (1996) emphasize the importance of such dynamic aspect of market orientation and argue that an organization is dynamic 'when an organization begins to challenge its long-held assumptions about customers, markets or strategy. These notions appear to have direct implications for how organizations acquire, process, and subsequently use market intelligence, i.e., their market orientation'. Old certainties regarding how the three core processes of market orientation should be performed in a firm may not be the most optimal ones, and as the

firm change their knowledge about markets new approaches to change (and improve) market orientation may occur. Such a need for change of the firm's market orientation may also emerge because of the competitors' imitation of 'best practice' and the competitors' own market orientation innovations. Accordingly, firms that hold a static market orientation, i.e. perform the core processes of market orientation the same way over time, may gradually lose any competitive advantage market orientation might give.

Fourth, the market orientation needs mechanisms that cannot easily be neutralized effectively and quickly to become a source of sustained competitive advantage. If all firms can easily adopt and implement effective market orientation techniques and procedures, market orientation cannot be a source of resource advantage (Hunt and Morgan 1995; Dickson 1996). Such a mechanism is not yet integrated into the concept. Consistent with Deshpande, Farley and Webster (1993), it can be argued that market orientation has to be embedded in the organization's way of thinking, its routines and culture to become efficient and beneficial to the organization. Thus, market orientation checklists and prescriptions for how to become market oriented that are readily available in textbooks and journals (e.g., Narver and Slater 1990; Jaworski and Kohli 1993; Kotler 1994) may require a mechanism that internalizes market orientation in the firm's routines. Such internalization is expected to give the firm a more smooth coordination of its performance of market orientation as well as provide the firm a protection against the competitors' imitation of its market orientation.

The four issues addressed above boil down to the need for a conceptualization of market orientation that contributes to sustained competitive advantage. In order to reveal such understanding of market orientation the resource- and capability-based literature is applied. The contribution of this literature to reconceptualize market orientation to accomplish the issues addressed above is summarized in Chapter 3.4.

### **3.1.2 Approaching market orientation as a firm capability**

To explain the role of market orientation, the evolving capability- and resource-based theory of the firm from the strategy literature (Teece, Pisano, and Shuen 1997; Mahoney and Pandian 1992; Wernerfelt 1984; Peteraf 1993; Barney 1991) is applied. Both market

orientation and the capability- and resource-based theory attempt to explain competitive advantage (Hunt and Morgan 1995). However, the explanatory mechanisms are more fine-grained in the capability- and resource-based theory, and thus, may contribute to an understanding of how and why market orientation can contribute to achieving and sustaining competitive advantage. The following discussion starts with a description of the capability- and resource-based theory of the firm.

The perspective of firm resources and capabilities is part of the economizing theories of the firm (cf., Williamson 1991; Teece, Pisano, and Shuen 1997). In general, theories and perspectives in business strategy can be clustered into strategizing and resource-based view (Conner 1991; Barney 1991; Williamson 1991; Mahoney and Pandian 1992; Teece, Pisano, and Shuen 1997). In the former, competitive advantage is primarily seen as a function of inherent industry attractiveness and the market positioning (conduct) of the individual firm to keep competitors off balance, raise rivals' costs and to create entry barrier for potentially new competitors (entrants). The latter, that is, the resource- and capability view, emerged as a counterpoint to market structure analyses of competitive strategy, and scholars (Wernerfelt, 1984; Penrose, 1959) identified a view of corporate strategy that placed valuable, unique and difficult-to-imitate skills, knowledge and other firm resources ahead of focusing exclusively on the competitive environment.

The resource- and capability view perceives the firm 'as a unique bundle of idiosyncratic resources and capabilities where the primary task of management is to maximize value through the optimal deployment of existing resources and capabilities, while developing the firm's resource base for the future' (Grant 1996). According to this perspective, certain kinds of internal resources and capabilities provide sustained competitive advantage to the firm. Since competitive advantage depends upon the fit between firm capabilities and resources and business conduct in changing environmental context, the two approaches (i.e., strategizing and economizing) may be seen as complementary rather than rival (Conner, 1991; Mahoney and Pandian, 1992). However, contrary to strategizing theories, the capability- and resource-based view is concerned with the importance of understanding and developing the firm's internal conditions, for example, market orientation, for achieving its competitive position.

Firm capabilities and firm resources are seen as important causes of firm performance, particularly sustained competitive advantage (SCA), both from a theoretical perspective (Penrose 1959; Nelson and Winter 1982; Wernerfelt 1984; Barney 1991; Hunt and Morgan



1995; Dickson 1996; Teece, Pisano, and Shuen 1997) and from empirical findings (Jacobsen 1988; Hansen and Wernerfelt 1989; Rumelt 1991). Competitive advantage can be understood as superior relative resource-produced value and lower, or parity, relative resource costs (Hunt and Morgan 1995:7). Thus, competitive advantage deals with 'above normal return on resources' that can be obtained by either lower costs and/or higher income. A competitive advantage is sustained if it is sufficiently robust to resist attacks from the firm's current as well as potential competitors and to meet changing preferences of customers. As some firms experience success in certain market segments, and thus, achieve attractive market positions, new competitors are likely to try to enter those segments (Dickson 1992). Therefore, the competitive advantage is sustained if the advantage continues to exist after consideration or/and efforts to duplicate that advantage have ceased: "sustained, superior financial performance occurs only when a firm's comparative advantage in resources continues to yield a position of competitive advantage despite the actions of competitors" (Hunt and Morgan 1995:8).

Market orientation can best be characterized as a firm capability, while the outcome of market orientation, i.e., organizationwide market knowledge, can be viewed as a resource. In turn, the resources (i.e., market knowledge) are applied in the activities undertaken by the firm. In order to define a market orientation capability the general definition of a firm capability suggested by Teece, Pisano and Shuen (1997) is useful. They define a firm capability as 'the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments' (Teece, Pisano, and Shuen 1997). A market orientation capability can thus be seen as the organization's coordination of current resources to produce and exploit organizationwide market knowledge (see Kogut and Zander 1992; Grant 1996). Moreover, the market orientation capability may also be labeled 'dynamic' to imply the capacity to renew firm resources (e.g., market knowledge) so as to achieve congruence with the changing business environment (Teece, Pisano, and Shuen 1997). Accordingly, market orientation becomes the firm's dynamic capability to integrate, develop, revise and use market knowledge, as the firm's competence related to market orientation, to address changes in the market.

However, clear criteria have not yet been developed to identify and characterize superior firm resources and capabilities (Argyres, 1996; Grant 1996; Nordhaug 1993). Briefly, the different definitions of firm resources and capabilities are fragmentary and no conceptual

agreement is identified in the literature. Dimensions such as competences, capabilities, higher-order resources, higher-order learning processes, invisible and visible assets, strategic assets and core, knowledge and skills partly overlap and partly represent different conceptualizations of resources in the literature (Teece, Pisano, and Shuen 1997; Conner 1991; Nordhaug 1993; Bogaert, Martens and Van Cauwenbergh 1994; Day 1994; Hunt and Morgan 1995; Dickson 1996). Bringing all dimensions together, almost everything in the firm becomes resources and capabilities. An avoidance of this is important to prevent parts of the economizing perspective from becoming redundant and tautological (Conner, 1991). Accordingly, there is a need to identify and distinguish capabilities (and resources) that are drivers of firm performance and sustained competitive advantage (SCA) from those which are not. Such a contribution may meet the demand according to a current review of dynamic capabilities where the following is argued: 'We have merely sketched an outline for a dynamic capabilities approach. Further theoretical work is needed to tighten the framework, and empirical research is critical to helping us understand how firms get to be good' (Teece, Pisano, and Shuen 1997). The purpose of this study is to make progress in developing distinct dynamic firm capabilities of market orientation to understand why and how such capabilities affect firm performance. The capability that will be the focus of this research is the firm's market learning capability, and this perspective is outlined in the subsequent sections.

It is a widely held assumption in the market orientation literature that firm performance, particularly in a world of innovation-based competition, heavily depends on the organization's ability to hold and exploit revised and accurate market knowledge (Slater and Narver 1995; Sinkula 1994). Presumably, the organizations that create and exploit such market knowledge better and faster than the competitors are most likely to achieve a competitive advantage in the market. As argued by several scholars (e.g., Dickson 1992; Kogut and Zander 1992; Teece, Pisano, and Shuen 1997), firms need capabilities that enable the organization to learn at a continuous basis. It is believed that one reason why firms differ in their market performance can be traced back to differences in learning capabilities (Kogut and Zander 1992). Although learning occurs at the individual level, the organization needs capabilities that direct and coordinate the learning resources and activities so the learning about markets becomes organizationwide, and thus, beneficial to the organization (see Kogut and Zander 1992; Grant 1996). Yet, the market orientation literature has not identified the capabilities of market orientation that continuously produce and exploit revised and accurate

market knowledge, and in turn, leads to competitive advantage. Such capabilities are important to identify in order to move towards knowledge about how organizations learn about markets and exploit such learning in their decisions.

To identify the different mechanisms (i.e., contents) of market orientation capabilities it is necessary to explore the organizational learning literature. So doing, capabilities of market orientation can be broken down into dimensions of market orientation learning, and thus, can 'tighten the framework' sketched by scholars in the capability-based literature (e.g., Teece, Pisano, and Shuen 1997; Kogut and Zander 1992) and in the market orientation literature (e.g., Slater and Narver 1995; Jaworski and Kohli 1996). The next sections present the organizational learning literature approach to market orientation as dynamic learning capabilities in order to contribute to a reconceptualization of market orientation as firm learning capabilities.

### **3.1.3 Defining market orientation as firm learning capabilities**

At its most basic level, learning is generally defined as production (e.g., accretion, tuning, restructuring) of knowledge (Cohen and Levinthal 1990). Market orientation, through information generation, dissemination, and use, attempts to continuously generate revised market knowledge, and thus, market orientation is defined as market learning.

To approach market orientation within the framework of organizational learning, the theoretical departure is Huber's (1991:89) definition of organizational learning, where "an entity learns if, through its processing of information, the range of its potential behaviors is changed". The definition holds that the organization's processing of information is the source of the organization's knowledge. The range of potential behaviors is related to whether the firm sees more and better exploitation of the resources to conduct activities. Accordingly, the market orientation capabilities represent the organization's learning about its resources to perform its market orientation activities more effectively. Such a view is consistent with the distinction between market orientation as a means definition versus market orientation as a means-and-end definition, in which the latter definition was rejected as theoretically useless in

Chapter 2.2.2. This leads to the following definition of market orientation as learning capabilities:

An organization learns about its market orientation resources if, through the processing of market information, the range of its potential market orientation activities is changed.

The definition states that an organization learns about its market orientation through knowledge about the organization's resources, and how they may be selected, developed, exploited, and combined to perform different kinds of market orientation activities. The resources are linked to behavior, and thus, learning is associated with how market orientation activities may be performed according to the organization's resource base.

Market orientation as a firm learning capability differs from the literature where market orientation is approached as both firm activities (Jaworski and Kohli 1993), firm resources (Day 1994; Hunt and Morgan 1995), and learning capabilities (Day 1994; Sinkula 1994; Slater and Narver 1995; Jaworski and Kohli 1996; Dickson 1996; Sinkula, Baker, and Noordewier 1997). However, these different approaches may be integrated and synthesized in a means-end model of the concept of market orientation. Such a model contains market orientation capabilities, market orientation resources, and market orientation activities. The purpose of such a model is to clarify how and why market orientation activities and resources are reflected by the firm's market orientation capabilities.

*First*, market orientation activities are information activities related to market information generation, market information dissemination, and market information responsiveness (cf., Chapter 2). A company which is market oriented may perform a lot of activities in order to gather market information, disseminate it, and eventually use it. A market oriented firm will probably perform more of such activities than a less market oriented firm. For example, a market oriented firm is believed to discuss the customers' preferences and competitors' strategies when a product idea is evaluated (Jaworski and Kohli 1993; Cooper 1994). Learning activities are not only the gathering of external market information but also the internal transfer (dissemination) of information among individuals and the information processing that occurs when the information is being used (Huber 1991; Grant 1996; Nelson and Winter 1982). The activity part of market orientation is argued to be an explicit way to evaluate whether a company is market oriented or not. Furthermore, such an approach is also

attractive in order to inform practice because different (normative) checklists can be offered to answer the question: what does it take to improve (increase) the firm's market orientation?

*Second*, market orientation activities are performed within, and as a result of, the firm's resources. Such resources are the organizational members' skills and motivation, the social structure (cf., norms, values, roles, communication links), physical assets (e.g., building structure, production equipment), administrative systems (e.g., planning systems, communication systems, decision system), etc. Some of the resources may be unique for market orientation activities (c.f., for example, customer files, competitor knowledge, customer relations) while other resources may also be used for non-market orientation activities (e.g., accounting skills, language skills, information technology, social network, industry knowledge). An important aspect of resources is that they are interchangeable, where the same activity may be executed by different resources, or combinations thereof. For example, conducting a customer satisfaction survey, the firm may buy such services (resources), or they can employ their own resources, or a combination of own and bought resources. Firms with access to superior resources (e.g., market knowledge) may be able to better perform market orientation activities (e.g., see more market opportunities) than firms with access to less superior resources. Accordingly, resources are used when performing market orientation activities. Some resources are also reinforced by the activities that are performed. Particularly, market knowledge is assumed to be a function of initial knowledge (cf., Cohen and Levinthal 1990) in addition to the information resulting from market orientation activities.

*Third*, each of the firm's resources is acquired, developed, exploited, and combined with other resources to perform market orientation activities (see Teece, Pisano and Shuen 1997; Brumagim 1994). This process is driven by market orientation capabilities through common codes of communication, coordinated search procedures, and organizational routines that are necessary to facilitate effective use of market orientation resources. The capabilities work through resources for the activities to be performed, and as such, a firm learning capability may also be called a combinative firm capability (Kogut and Zander 1992). Since capabilities determine the acquisition and exploitation of firm resources (and thus activities), they are dynamic by nature. Consequently, the market orientation capabilities represent the dynamic aspect of market orientation, and may facilitate the market orientation activities to become dynamic (e.g., new ways to generate and utilize market information).

Although individual employees may acquire new knowledge, and thus, may be viewed as being dynamic, the effect may not be notable at the organizational level due to lack of coordination and common direction of individual change. Knowledge is created by individuals, and an organization cannot produce knowledge without individuals (Nonaka 1994; Simon 1991). The organization provides a context for individuals, for example through social interaction, to create complementary and common knowledge among individuals. The organization amplifies such learning and internalizes it as part of the organization's knowledge (Nonaka 1994; Grant 1996). Thus, market orientation learning capabilities serve as drivers of the acquisition, exploitation and development of organizational learning because the learning is less likely to be organizationwide without any coordination of the resources (e.g., individuals) to perform learning activities that will benefit organizational learning. Coordination may be through formal systems (e.g., rules and directives), leadership, organizational routines (e.g., mutual adjustment), etc. (Nonaka 1994; Kogut and Zander 1992; Levitt and March 1988; Grant 1996). Developing and integrating the knowledge of many different individuals, and other resources of the firm, in the process of performing market orientation activities is what makes market orientation learning capabilities important to the firm.

The theoretical role of market orientation as learning capabilities is illustrated in Figure 3.1. Market learning occurs through individual and interpersonal activities. Such activities are performed using the resources of the firm (e.g., individual and shared competences). These resources are acquired, developed, exploited and combined within the organization, and are called market orientation learning capabilities.

**FIGURE 3.1**  
**The role of market orientation learning capabilities**

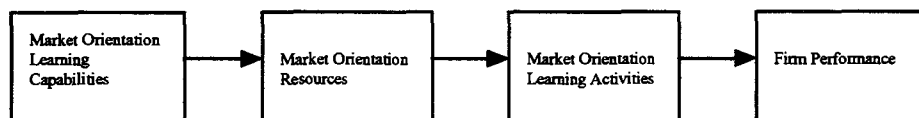


Figure 3.1 illustrates that market orientation activities act as an outlet for the market orientation capability. The utilization of market orientation activities, reflects the kinds of market orientation capabilities a firm possesses. Since learning does affect the range of potential market orientation activities (e.g., decisions, actions connected to a change in MO-resources) an organization learns if it sees more possibilities and constraints associated with its market orientation resources and current activities. Consequently, identifying such learning capabilities should cause more insight into how to improve information generation, information dissemination and the use of market information for market (related) decisions.

Since market orientation dynamic capabilities are the coordination mechanisms of the organization to produce and exploit new and revised market knowledge, the organizational learning literature may be useful to identify distinctive market orientation mechanisms that together accomplish the criteria of market orientation as strategic and dynamic capabilities. The perspective of organizational learning on market orientation is not new. Several researchers have advocated that such a perspective may be of value to acquire more knowledge about how and why market orientation may be a source of sustained competitive advantage for the firm (Jaworski and Kohli 1996; Slater and Narver 1995; Day 1994; Sinkula 1994).

In general, studies of organizational learning differ with respect to at least two dimensions (Cohen and Sproull 1996). These two dimensions will be used to restrict the general concept of organizational learning to consider market orientation as a learning capability. *First*, the literature differs in the use of the organization (Levitt and March 1988; Huber 1991; Nelson and Winter 1982) or the individual (Argyris 1982) as the primary unit of analysis. Although there is an inter-relationship between the two levels of analysis (Weick 1979; Nonaka 1994), the focus of this study is limited to the organizational level literature. Market orientation capability is considered to be an organizationwide concept (cf., Chapter 2) and the organization is the potential beneficiary of the learning, and thus, an emphasis on how *organizations* learn about market orientation is chosen in this study. *Second*, the literature contains both descriptive and prescriptive theories. The prescriptive theories of organizational learning (Argyris and Schön 1978; Senge 1990) are viewed as being manipulative and normative. In contrast, descriptive theories focus on factors facilitating and impeding organizational adaptation (Huber 1991; Levitt and March 1988). For the purpose of this study, market orientation capability is explored to consider to which extent it serves as a factor that

influences organizational adaption, and thus, a *descriptive perspective* is applied with respect to choice of theories and literature.

Additionally, the organizational learning literature has a much broader focus and scope of potential kinds of performance. Market orientation concerns learning about customers and competitors. Other domains of learning (e.g., human resources, finance, suppliers) are excluded from the definition of market orientation capabilities but included in the general concept of firm capabilities (see Chapter 2 for a discussion of the domain of market orientation). Consequently, market orientation capability has a fixed focus while organizational learning has a fluid focus. Particularly, market orientation capability has a defined focus (market) and specified processes (generation, dissemination, and response), and thus, is less ambiguous than organizational learning (Sinkula 1994).

In a review of organizational learning theory, Slater and Narver (1995) identify market orientation aspects like questioning longheld assumptions, experimentation, and shared interpretations to describe the contents of market orientation learning. In their work they justify that learning about markets is multi-faceted, and that the organization's learning depends on the ability to manage several learning mechanisms at the same time. Although Slater and Narver suggest several facets of market learning, they do not identify distinct market orientation learning capabilities and mechanisms. Identifying the different market orientation learning capabilities that contribute to the firm's sustained competitive advantage (i.e., are of strategic importance to the firm) is yet to be done to understand the mechanisms of the organization's production and utilization of market information (Slater and Narver 1995; Dickson 1996; Jaworski and Kohli 1996). The next chapter uses the criteria of strategic capabilities from the resource-based theory in order to identifying market orientation learning capabilities that are of strategic importance to the firm.



## **3.2 CONSIDERING MARKET ORIENTATION AS A STRATEGIC CAPABILITY**

To be a strategic capability, market orientation must contribute to showing how firms achieve and sustain competitive advantage (Rumelt, Schendel, and Teece 1994). The discussion attempts to determine the need for learning mechanisms for market orientation to become a contribution to sustained competitive advantage. To consider to which extent market orientation can be seen as a strategic learning capability and a driver of sustained competitive advantage, three requirements should be accomplished. These are (1) the question of value, (2) the question of rareness, and (3) the question of the difficulty to replicate (Barney 1991; Teece, Pisano, and Shuen 1997). The subsequent discussion will raise the three questions with respect to the current conceptualization of market orientation, as defined in Chapter 2, and consider the potential for modification and extension of the concept of market orientation learning capability to meet the needs addressed in Chapter 3.1.1.

### **3.2.1 The question of value of market orientation as capability**

For a capability to be of strategic relevance it must be honed to a user need so there is a source of revenues (Teece, Pisano, and Shuen 1997). The question is then to which extent the firm may benefit from market orientation as a learning capability.

Market orientation, as defined in Chapter 2, is the organization's capability to generate, disseminate, and use organizationwide market knowledge. This market knowledge enables the firm to adapt the offerings to the needs of the market, and thus, enables the firm to serve the market in a superior way (Slater and Narver 1995; Kohli and Jaworski 1990). Knowledge about customers' preferences, price sensitivity, and other factors that affect choice of products and sellers is valuable to offering products that may be demanded. Furthermore, knowledge about the competitors' products and marketing effort enables the firm to position the products effectively. In contrast, lack of market knowledge leads the firm to handle the market blindly, and thus, decreases the market performance reliability at best, and the firm can be successful in the market by chance (cf., March 1991).

For organizations with high prior knowledge regarding markets they might have to learn less to attain a given level of performance than organizations with less prior knowledge (Cohen and Levinthal 1990:130). For market learning in general to become efficient, there must be a need for new and more market information, independent of the current level of knowledge. As stated by Dickson (1992:70), a market consists of heterogeneity in demand and supply. The heterogeneity of demand will affect the supply (but also vice versa), and if some of the sellers are less risk averse, they tend to prefer more risk-adjusted profit to less risk-adjusted profit. Consequently, they will focus on the more attractive segments or market niches, and a market can best be described as being constantly changing (i.e., the continuous heterogeneity in supply and demand that affects market disequilibrium). On the other hand it is assumed that more profitable market segments will attract more suppliers and that supply will eventually exceed demand in those segments. The constant imbalance (or disequilibrium) between supply and demand in market economies forces sellers to experiment with new ways of serving the customers. Accordingly, the core of Dickson's dynamic model of competition is:

The intensity of seller rivalry creates the drive to experiment with product design, service, or price. The sellers that are most motivated by such rivalry and the desire to earn profits or increase market share strive the hardest in their search for new ways of effectively and efficiently serving customers. That motivation to improve encourages sellers to learn directly from environmental stimuli - their own experimentation, rivals' experiments, and the experiments of sellers in other markets. The sellers that are most alert to such cues are the most competitive. Alertness requires acute, unbiased perception of change in the marketplace and the studious consideration of the impact of such change on all facets of market decision making. (Dickson 1992:70-71)

Because of this interaction between supply and demand, the market will always be in a state of "supply-demand flux". As firms face a situation of heterogeneous and dynamic supply and demand in the market, the need for coordinated and proactive response arises. Therefore, adaptability to the market becomes a central problem of market organizations. Since the market is both heterogeneous and dynamic this requires that the organization's learning about markets (and segments) is comprehensive, fast and continuous.

Market orientation attempts to revise the organization's market knowledge to keep up with the market evolution<sup>5</sup>. To explore market opportunities before competitors do, the organization has to develop a superior understanding of the market. As long as competition is present at some level, market orientation is considered as a learning capability contributing positively to firm performance. Although more market orientation seems to be better, it will not be an unreasonable assumption to believe that the effect on performance will be diminishing at some point. Obviously, market and business performance rely on more factors than market orientation (e.g., see Hambrick 1982; Lines 1992), and thus, a too strong emphasis on market orientation may be a waste of resources and may reduce the effort in other sectors of the firm. However, the main tendency is that being more market oriented than the competitors may lead to a comparative resource advantage, and thus, to a competitive advantage in the market (Hunt and Morgan 1995).

Thus, market orientation, as defined in Chapter 2, can be argued to be a valuable capability since it enables the firm to make a market offer that fits the changing needs and competition. The empirical studies provide support for the assumption that market orientation affects performance dimensions such as overall performance, profitability, new product success, and sales growth (for an overview, see Appendix 1). Although the literature provides somewhat mixed support for the effects reported above, the overall evaluation of the findings leads to the general conclusion that market orientation is valuable to the firm (see, e.g., Narver and Slater 1990; Jaworski and Kohli 1993; Ruckert 1992). However, even if the current approach to market orientation seems to be of value to the firm, this does not necessarily mean that the current conceptualization fully captures firms' dynamic capability to integrate, develop, revise and use market knowledge, to address changes in the market(s).

Most markets change because customers and sellers get stimuli from other industries. For example, customers learn to get used to information technology, and this opens up for internet shopping and computer-aided in-store shopping. Another example is when a credit card company starts selling products via mail order because it has comprehensive information

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<sup>5</sup> Thomas, Clark, and Gioia (1993:259) found a positive effect of environmental scanning on product-service change. However, they did not find any direct effect of environmental scanning on profitability. Moreover, they found a positive effect of product-service change on profitability, and thus, a positive indirect effect of environmental scanning on profitability. They argue that that scanning increases the perception of the number of opportunities that the firm faces, and that can be controlled through actions. Moreover, they also found that external scanning had a stronger positive impact on performance than internal scanning.

about its customers and thus discover that it can easily make use of such information to extend its product line. A final example is that laser-based eye surgery may offset (or reduce) the market for lenses. A focus on current markets may lead a firm to market myopia (Levitt 1960). A hotel does not only compete with other hotels to attract customers (new and current ones) but competes also with cruise ships, air lines, cabins, telephone conferences, etc. A focus outside its own industry (e.g., hotel industry) may be necessary to develop new attractive market offerings (e.g., a combined 5-days hotel vacation and a 5-days cruise). The importance of a broad market scope is emphasized by several researchers to enable the firm to adopt a proactive market strategy (see e.g., Hamel and Prahalad 1994; Dickson 1992; 1996).

Market orientation as defined in Chapter 2 holds a focus on current and potential customers and competitors. However, the market orientation literature seems to focus on current and potential customers and competitors within a product/market, and does not explicitly focus on the application of current resources in new (emerging) segments or auditing of competitors in other industries. The items used to measure market orientation (Jaworski and Kohli 1993) reinforce this view. The current definition of market orientation seems to be biased toward an exploitation strategy, where the company should improve its performance through knowledge about its industry and current strategic focus. To increase the value of a market orientation capability a theory of the effects of market orientation should add a market orientation domainwidth capability. In the organization learning literature such capability is known as exploration ability, in contrast to exploitation ability (March 1991; Levinthal and March 1994).

In a market customers and competitors will change their behavior and mental models (Dickson 1992). This implies that the value of the firm's market information generation, dissemination and responsiveness will change over time. Companies may imitate each other with respect to information activities (e.g., customer satisfaction surveys, annual image surveys, brand tracks) and bundles of market orientation activities (e.g., total quality management systems). To get information that contributes to competitive advantage the companies may benefit from reconsidering their market orientation activities to find new ways to get unique and better information, and accompanying dissemination and response. Many companies' adoption of qualitative research, advanced quantitative research, use of lead-users, cross-functional teams, etc. may be examples of how companies continuously adopt new activities of market orientation to get ahead of the competition. The current definitions of

market orientation do not focus on the renewal of market orientation activities. In fact, the definition holds that as long as the company gathers, disseminates and uses market information it is market oriented. Such a perspective is rather static and does not (explicitly) focus on learning about the firm's market learning (Dickson 1996; Slater and Narver 1995). To fully capture the renewal aspect of market orientation, a market orientation means alteration capability should be added.

The definition given in Chapter 2 of market orientation does not include the renewal of the organization's market orientation practice. For the organization to learn about its own market orientation it should question its own practice and make experiments with new ways to generate, disseminate and use market information.

The current definition of market orientation is considered to be a market orientation information system capability. This label will be used from now on in order to open up for additional market orientation capabilities. Market orientation information system (MOIS) is expected to enable the organization to generate new and accurate market knowledge, which is useful when a market is changing. Market heterogeneity reinforces the value of a comprehensive information system since more information enables the organization to get accurate information about segments and key-customers and competitors which may be useful to adapt and differentiate the market offerings. However, the definition of MOIS does not capture the usefulness of a broad domain focus and renewal of MOIS practice. Such facets are expected to be of value for an organization's market orientation capabilities. The two additional learning capabilities suggested here are called market orientation domainwidth and market orientation means alteration, respectively.

### **3.2.2 The question of rareness of market orientation as capability**

If a capability should contribute to competitive advantage it has to be rare among competitors. A valuable capability which is rare causes a comparative resource advantage, and thus, a relative competitive advantage (Hunt and Morgan 1995; Barney 1994). Firms having a rare capability will have an advantage over those who do not control it. A rare capability, given that it is valuable, may enable the firm to perform its activities better than its competitors

(Hunt 1995:322; Peteraf 1993). A central issue in the marketing textbooks is that many firms are assumed to lack a comprehensive market orientation, and thus, opens up capability advantage opportunities for those firms that are, or can be, more market oriented than their competitors. To consider whether market orientation is rare, and thus a potential source of comparative advantage, the capability should be observed to be unevenly distributed among firms. Slater and Narver (1994) reported a mean of 4.68 and a standard deviation of .60 for market orientation information system with a sample of SBUs <sup>6</sup>. Since market orientation was measured using a seven point scale this indicates that high values for MOIS are not common among companies. Accordingly, using the information from a low standard deviation, only a few firms are highly market oriented. Consequently, high levels of MOIS may be characterized as rarely distributed among firms.

Moreover, organizations tend to conduct exploration strategies, i.e., market orientation domainwidth and market orientation means alteration, less than they perform exploitation strategies (March 1991; Levinthal and March 1994). It is argued that market orientation exploration is rare because it conflicts with exploitation strategies of, among other things, market orientation activities. Most companies seem to continue to do what has brought success in the past (Nelson and Winter 1982) and to capitalize on the possibilities the firm sees within its current market orientation practice and resources. Experimenting with new types of data collection, dissemination of information and new ways of using market information in market decisions is often risky and leads to disturbance and temporary lower effectiveness in the organization (Hamel and Prahalad 1994). Similarly, paying attention to markets outside current segments is often less urgent than solving the problems of competitive threats and customers' needs in current markets. Very often an organization is adapted to particular market segments, through personnel skills, sales force organization, market knowledge, and as such, the organization does not have the motivation, competence and capacity to pay attention to possibilities and threats outside current markets. Perhaps this explains why new firms often are the ones that innovate in new and emerging segments and markets (Dickson 1996). Accordingly, the three market orientation capabilities are expected to be unevenly distributed among firms and thus should be expected to contribute to a comparative competitive

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<sup>6</sup> Slater and Narver's definition and measures of market orientation do not capture information generation, dissemination and responsiveness sufficiently to cover the construct of market orientation information system. However, it is related enough so the information regarding mean and standard deviation may be an approximation of the distribution of MOIS in the sample they used.

advantage. The three market learning capabilities are hitherto argued to be both valuable and rare. The next section addresses to which extent the market orientation capabilities can easily be neutralized effectively and quickly, and thus, determines whether the three capabilities may be a source of sustained competitive advantage.

### **3.2.3 The question of imitability of market orientation as a capability**

If a capability is valuable and rare, competitors will probably try to imitate it. If it is possible to imitate a valuable and rare capability it will only lead to a temporary competitive advantage. For a capability to be a source of sustained competitive advantage it has to be costly or difficult for competitors to imitate it (Barney 1991; Teece, Pisano, and Shuen 1997). If it is difficult to replicate (imitate) a capability the profits will not easily be competed away. The basic nature of such difficult-to-imitate capabilities is that they cannot easily be assembled through markets (Zander and Kogut 1995; Teece, Pisano, and Shuen 1997). Three factors may contribute to imitation difficulty of capabilities: firm history, underlying decision process, and social dependency (Barney 1994; Dierickx and Cool 1989). Each of the factors will be discussed with respect to market orientation information system as a dynamic learning capability.

*First*, the firm's history may constitute a barrier for firms to become (more) market oriented and to imitate successful market orientation activities. Such a barrier is called path dependency and is defined as a 'sequence of economic changes in one of which important influences upon the eventual outcome can be exerted by temporally remote events, including happenings dominated by chance elements rather than systematic forces' (Davis 1985). Accordingly, the firm's market orientation capability may be characterized by situations the organization has been exposed to. Such experience differs across firms. Individual and shared experience from certain markets, competitors, customers, products, events, crises, etc., affect the way the organization's members may think of and approach market information (Lines 1992; Kohli and Jaworski 1990; Dearborn and Simon 1958). So doing, idiosyncratic experience leads to idiosyncratic learning, and thus, the organizations are likely to hold different beliefs regarding market information generation, dissemination and response for

different situations. For example, a product development project may have failed because of lack of particular information or because of lack of cross-functional interpretation. Such experience may motivate the company to redo its market orientation practice next time it is in a similar situation. Competitors will probably not be able to understand and predict the company's market orientation capability without understanding the company's history. Market orientation information system capability may benefit from path dependence. However, market information generation, dissemination and responsiveness are in themselves not reflecting such a barrier because the ability (capability) to perform the three kinds of activities is in itself independent of any history of the firm.

*Second*, underlying decision processes contribute to making a capability easy or difficult to replicate. If a company can perform market orientation activities based on a "Big Decision" made by the board or the CEO such capability is expected to be easy for the competitors to imitate (Barney 1991; 1994). In contrast, if information generation, dissemination and responsiveness is a continuous process of numerous small decisions such capability is more difficult for the company itself to fully understand, and thus for the competitors to imitate. To become market oriented it is argued that the company has to accumulate capabilities:

.. competitors may not recognize a genuinely market-oriented competitor when they encounter one. Moreover, a market orientation is intangible, cannot be purchased in the marketplace, is socially complex in its structure, has components that are highly interconnected, has mass efficiencies, and is probably increasingly effective the longer it has been in place. Finally, there is probably a significant tacit dimension to implementing a market orientation effectively. Employees learn how to be market oriented not solely from reading policy manuals or textbooks but from associating with other employees that are already market oriented. (Hunt and Morgan 1995:13)

According to Hunt and Morgan, market orientation is a learning process, based on experimentation and accompanying exploration. Although many of the components of market orientation can be bought in the market (e.g., customer satisfaction surveys, information about competitors), each of the components has a limited role in the entire organizationwide market learning process. In particular, bringing all parts of the organization into direct or indirect contact with the customers requires a highly complex and comprehensive commitment to market orientation. Consequently, market orientation will evolve cumulatively and is more a function of incremental changes rather than a 'big decision'. As the organization acquires



organizationwide knowledge about the market, the ability to explore and exploit more relevant information will increase. The system of generation, dissemination and utilization of market information will also have to be adapted to the particular markets, products, and organizations.

Although it is likely that a market orientation information system capability is tacit and works best when it has been practised by the firm for a long time, it is also possible to think of the same capability as anchored in manuals, initiated by consultants, incentive systems, and other easy-to-read capabilities and resources.

*Third*, market orientation is embedded in a social context. The organization's ability to be market oriented depends on several social factors, such as, organizational culture (Deshpande, Farley, and Webster 1993), top management's emphasis and risk aversion, interdepartmental dynamics, and organizational systems (Kohli and Jaworski 1990; Jaworski and Kohli 1993). These factors may facilitate as well as impede the acquiring of a superior level of market orientation. If there are a few important drivers of market orientation it may be easy for competitors to implement market orientation. If the number of drivers is high such implementation becomes more difficult. There exists little knowledge about drivers of market orientation, and the explained variance for the proposed antecedents is modest. Following Barney (1991), social dependent capabilities are likely to be difficult and costly for competitors to imitate. Therefore, if market orientation is anchored in the social system, which the current literature suggests, it may be difficult to imitate. However, such anchoring should be based on system-interdependencies to become difficult to imitate (Kogut and Zander 1992; Nelson and Winter 1982). If such interdependence exists, no single recipe to imitate or duplicate market orientations activities will exist, simply because market orientation activities are idiosyncratically embedded in the organizations. Although market orientation information system capability is expected to be characterized as such, it is also here possible to think of comprehensive generation, dissemination and responsiveness to be performed without such tacit elements.

The overall assessment of market orientation information system capability with respect to the question of imitability relies on to which extent it is performed as a tacit capability (Barney 1991; Kogut and Zander 1992). If the capability is tacit it is believed that it is difficult for the competitors to imitate it. However, it is not obvious that a capability of market orientation information system is tacit. It may be very likely that a company may gather

market information, disseminate such information through different means and respond to it without the capability necessarily being tacit. Accordingly, for the market orientation to become a strategic capability to the firm it should also include a market orientation tacitness capability. In addition to it being difficult to imitate such a capability a tacit market orientation might be more effective to the firm since market orientation is embedded in the organizations as routines and thus becomes smoothly performed (see Nelson 1991; Nelson and Winter 1982).

The two market orientation exploration capabilities are in Chapters 3.2.2 and 3.2.3 argued to meet the requirement of value and rareness to become strategic capabilities. According to March (1991) and Levinthal and March (1994) a firm's obstacle to perform exploration strategies are found in its scarce resources. Firms cannot do everything at the same time and many firms tend to do what they already do and what is related to current competencies and activities. Thus, the two market orientation exploration capabilities are not considered as having potential for being tacit and difficult or costly for competitors to imitate. In fact, it is more likely that market orientation exploitation has potential to become tacit since the organization internalizes certain activities, skills, and routines and become better at what they already do (Nelson and Winter 1982). According to Nonaka (1994), exploration is the process of making tacit knowledge non-tacit (i.e., the process of knowledge externalization) in order to analyze other ways of doing things in the firm.

### **3.2.4 Conclusion**

The analysis of market orientation as learning capabilities demonstrates several areas of reconceptualization for market orientation to become strategic (learning) capabilities. Four market orientation capabilities are suggested to be needed in order to develop a theory of the effects of market orientation as dynamic learning capabilities.

Market orientation as defined in Chapter 2 is relabeled as market orientation information system and is of value for the firm to produce and use organizationwide market knowledge. It is also believed to be rarely distributed among firms, and thus, contribute to

comparative advantage. However, it is unclear to which extent market information generation, dissemination and responsiveness are difficult or costly to imitate.

It is suggested that two market orientation exploration capabilities should be added to explicitly include the believed value of domainwidth and means alteration of market orientation. Such capabilities are highly critical for a firm to hold in order to be successful over time (e.g., March 1991; March and Levinthal 1994; Lyles and Schwenk 1992), and are believed to be rarely distributed among firms. Accordingly, market orientation domainwidth and market orientation means alteration are suggested to be two additional and complimentary dynamic learning capabilities.

The three capabilities mentioned above do not necessarily imply a tacit dimension. Therefore, a fourth capability, market orientation tacitness, is suggested to imply a difficult and costly-to-imitate aspect of market orientation as dynamic learning capability.

The next chapter discusses each of the four capabilities using the organizational learning literature as theoretical framework. The following discussion attempts to clarify the mechanisms of each of the capabilities and how and why the four capabilities may contribute to firm performance.

### **3.3 MARKET ORIENTATION AS FOUR DYNAMIC LEARNING CAPABILITIES**

This chapter extends the discussion of the content and role of the four learning capabilities identified in Chapter 3.2. The following discussion will focus on organizational learning to explain how market orientation activities may contribute to competitive advantage, and potentially sustained competitive advantage. The greatest advantage of using organizational learning theories is to be found in its explanatory power regarding critical aspects of efficient learning. The market orientation literature bases many of its arguments on axioms and assumptions raised in the marketing literature. The organizational learning literature represents a comprehensive framework with a potential for developing a network of hypotheses for the effects of market orientation (Jaworski and Kohli 1996; Slater and Narver 1995; Day 1994; Sinkula 1994).

Three aspects from the organizational learning literature will be considered in conjunction with the effect of market orientation, and will constitute a theoretical foundation for the development of hypotheses. The first is cognitive learning which is relevant to understand the role and effects of market orientation information systems. The second is exploitation and exploration learning strategies which is applied to understand market orientation domainwidth and market orientation means alteration. Third, and finally, theories on tacit knowledge are used to understand the market orientation tacitness capability.

#### **3.3.1 Market orientation information system capability**

One of the most central aspect of market orientation is the ability to learn about markets through generation, dissemination, and use of market information. This ability will be discussed in the light of the concept of cognitive learning. Central to cognitive learning is absorbing capacity and the chapter proceeds with one of the implications of absorbing capacity, which is called 'market orientation information system as syndrome'. The chapter ends with a conclusion of the issues addressed in the chapter.

### 3.3.1.1 The concept of cognitive learning

To understand how organizations learn, it may be useful to make use of the basic of associative learning at the psychological level (Cohen and Levinthal 1990). Associative learning means that new knowledge is developed in which information is recorded into memory by establishing linkages with pre-existing concepts (see Bower and Hilgard 1981:424; Brucks 1985). Accordingly, market information will be a source of market knowledge. However, for the information to become knowledge, there has to be an established network of linkages between pre-existing concepts. This leads to the phenomenon of absorbing capacity.

Absorbing capacity implies that sensemaking and intelligible information depend on prior knowledge of the units processing the information. The richer the organization's a priori knowledge, the more comprehensive interpretation of information can be made. In contrast, lack of a priori knowledge can cause an oversimplification of complex information, a biased interpretation, and/or inaccurate inferences. Exploitation of outside knowledge (e.g., market information) is then largely a function of the level of prior related knowledge. The more prior knowledge, the more accurate interpretations can be made (Levinthal and March 1994:97). For example, studies show that firms that conduct their own R&D are better at utilizing externally available information, and thus, absorbing capacity can be seen as a byproduct of a firm's R&D investment (see Cohen and Levinthal 1990:129).

A central issue in the debate of market orientation as a learning capability is its dynamic nature. Memory development is self-reinforcing because the more objects, patterns and concepts that are stored in memory, the more readily is new information about markets gathered and the more facile are the individuals and organization in using them in new settings like new markets and for new products (Cohen and Levinthal 1990:129). Learning produces knowledge, which in turn, augments the organization's absorbing capacity. Thus, learning has a self-reinforcing effect that facilitates learning as a source of sustained competitive advantage. The implication of the self-reinforcing effect is that market learning is cumulative, and thus, greatest when learning is related to something already known. When the organization has a low degree of market orientation, the absorbing capacity regarding new market information is very low.

Learning is most difficult when it occurs outside the organization's current body of market knowledge. Companies that are not very market oriented might simplify their

interpretation of market information (see Levinthal and March 1994). Since the environment is complex and dynamic there is a need for a simple understanding of it to match current firm knowledge. This process can contribute to a biased knowledge since the level of simplification will reflect a priori knowledge. For example, low a priori knowledge about the competition in the principally served market might lead to an organizational ignorance about previously non-salient traits (e.g., identification and understanding of the consequences of competitors' loyalty programs, alliances and information technology) that can have a significant impact on future competition. Additionally, new market information is framed and interpreted so it matches current beliefs. Consequently, people, when having low a priori knowledge, easily form simple cognitive models of cause-effect relations that may have little validity (Starbuck 1983). In contrast, high a priori knowledge can enable the organization to be more aware of multiple (previously non-salient) aspects of the competition, and thus, lead to a more comprehensive analysis of the consequences of the competitors' (and potential new entrants') plans and behavior. Therefore, the more the processing between the items to be learned (i.e., market information) and prior market knowledge, the easier it is to retrieve the information for effective use in problem solving (Cohen and Levinthal 1990:131). Accordingly, the absorbing capacity is expected to increase progressively as the degree of market orientation information system capability becomes greater, and thus, the impact of learning is believed to be non-linear.

### **3.3.1.2 Market orientation information system as an interactive syndrome**

Market orientation information system capability may represent the understanding of how to plan the organization along formal and informal structures for the purpose of being market oriented. This ability can be defined as a combinative capability (Kogut and Zander 1992), where the organization synthesizes and applies current and acquired market knowledge. This capability implies the search rules (i.e., heuristics) or scripts the organization uses to gather, disseminate and respond to market information. Consequently, to organize all these market orientation resources and activities for the entire organization, the organization needs common knowledge about who knows what (e.g., access to certain external

information), how activities are organized, who needs certain information, and how to communicate with other units (i.e., development of unique language or code). Market orientation information system requires the practice of all these script elements to be done smoothly and efficiently.

For market orientation to become a combinative capability, the market orientation information system capability has, to a great extent, to be done automatically. Such traits may be labeled as organizational routines (Nelson and Winter 1982). The routines give stability in operational activities of market orientation and improve efficiency. An organization's routines represent the underlying mechanisms of its skills and activities. The more the routines are practiced through activities the better they become. As argued by Borman (1994) and Simon (1991), common knowledge between units reduces coordination costs due to a common problem representation. In contrast, activities which are not related to the routines and common knowledge are not performed well. Since routines are reinforced, the organization will perform activities they are familiar with and ignore or avoid to undertake activities that are not related to the organization's routines. The result might be that the organization is resistant to adaption that requires the use of new routines. Consequently, to become market oriented is difficult and costly *if* it requires different routines than currently used by the organization.

The basic idea is that the market orientation information system capability may contribute to develop and utilize the market orientation resources smoothly and efficiently. One expected manifestation of market orientation capability can be the 'market orientation activities syndrome'. The market orientation information system as syndrome can be defined as a group of symptoms that together are characteristic of a specific condition (cf., Webster's dictionary). The group of symptoms are equality of the values for each of the market orientation information system dimensions (generation, dissemination, responsiveness) and the condition is market orientation information system capability. The organization is expected to gather information for the purpose of distributing it organizationwide for decision use. The more match among the three dimensions of market orientation information system activities, the less waste of resources and the more efficiently the different activities are performed. Ideally, all information generated should be distributed, and all distributed information should be considered for use in the different market related decisions. The greater the gaps are, the less smoothly and efficiently the market orientation information system activities are performed. Information might be gathered but not used. Decisions about markets might be

made without market knowledge and market information, and so on. Additionally, when the organization uses market information in decisions, it is expected to learn the efficiency of the information generation and dissemination, and thus, they learn what kind of information is useful to the firm. Such learning is most efficient when the market orientation activities are tightly coupled and the organization can identify efficient patterns of resources and activities, and where the activities support each other. Accordingly, a market orientation information system may be seen as a syndrome for companies characterized by high level of the market orientation capability. For companies with less developed market orientation capability, the gaps among the different dimensions of market orientation activities are believed to be greater.

In the market orientation literature, Kohli, Jaworski & Kumar (1993: 473) suggest that a potential causal ordering among the dimensions of market orientation may be of interest to explore to overcome potential weaknesses of the current approach to the market orientation construct. In a pragmatic sense, the three dimensions of market orientation activities are most effectively organized as follows: generation → dissemination → responsiveness. Market information that is not disseminated and/or used is not as efficient as information disseminated and used by the firm because it does not lead to organizationwide learning. A market oriented company should be expected to gather market information, to disseminate this information, and eventually, utilize the information as a basis for the collective and individual decisions and behaviors. Each of the dimensions constitutes an upper limit for the firm's (overall) market orientation information system capability. It makes little sense to argue that a company is highly market oriented if market information is gathered but not utilized in the firm's decision processes. Non-utilized market information is of very limited value for the company. In fact, an uneven amount of market orientation for each of the dimensions can cause a costly and false impression of being market oriented (Kohli & Jaworski 1990). Since a company can be strong on one part of market orientation but lacking on other parts, this is not consistent with the market orientation information system capability concept.

The current empirical literature views market orientation information system activities as a 'volume index' (Jaworski and Kohli 1993; Kohli, Jaworski and Kumar 1993; Narver and Slater 1990). Such an approach implies that evenness among the different dimensions is not awarded. In contrast, at the extreme, an organization that gathers much information but only disseminates some of it and only respond to market information to a limited extent may receive the same overall score of market orientation as a company that generates some information,



disseminates most of it and responds to most of it <sup>7</sup>. Consistent with the theoretical and conceptual arguments found in the literature (Kohli and Jaworski 1990; Jaworski and Kohli 1993; Kohli, Jaworski, and Kumar 1993; Moonman 1995) the dimensions of market orientation information system cannot be seen as independent representations of the capability. Only when they support each other the company is consciously market oriented, and thus, reflects a market orientation capability which is valuable, rare and perhaps even costly to imitate.

Turning the argumentation above around, a company which has a market orientation information system capability will most likely be very careful with respect to the kinds of market information that are generated, make serious attempts to facilitate the dissemination of it, and try to use it in market strategy decisions. In contrast, such consciousness is not expected to be found for market orientation activities in companies that are not driven by a market orientation information system capability. Accordingly, the 'volume index' approach may not distinguish between a 'spurious' and a 'true' market orientation capability. In contrast, the 'market orientation information system as syndrome' rewards to a greater extent companies that have a more even level of market orientation activities across the three dimensions, and thus, might contain a better representation of the market orientation capability.

The impact on firm performance is believed to be positive for market orientation activities as a syndrome. Market information is gathered by people from different functions of the organization. This should lead to less biased information. Moreover, the dissemination of information enables multiple interpretations within the organization. Such a process may cause more accurate knowledge about market needs and the competition. Moreover, market strategy decisions that are based on valid information about the possibilities and threats in the market are most valuable to the firm in the long run. The impact on market performance is believed to be greatest for market orientation information system as syndrome than for the 'volume index' capability. The latter form of market orientation capability is believed to be less efficient because the organization does not manage to integrate the different market orientation resources and market orientation information system activities. Lack of integration is

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<sup>7</sup> The following *moderate* example for a company's score on the three dimensions of market orientation information system may provide an illustration of the difference between the two approaches:

Generation	Dissemination	Responsiveness	Sum (volume index)	Sum (syndrome index)
14	10	6	30	840
10	10	10	30	1000

Note. the volume index is an additive index while the syndrome index is a multiplicative index.

inconsistent with efficient absorbing capacity of the entire organization since the different market orientation resources and activities are loosely coupled. Accordingly, learning becomes local and not organizationwide.

Market orientation information system as syndrome is consistent with the conditions for absorbing capacity. An organization's absorbing capacity relies on organizationwide learning, which is the case of market orientation information system as syndrome. The syndrome approach may reflect to which extent the organization may utilize the market information via knowledge for decision making and activities toward markets.

### **3.3.1.3 Conclusion**

The chapter holds that the organization must have a priori knowledge to be able to absorb market information. Since knowledge is a function of information, the conduction of market orientation information system activities is a self-reinforcing process. The more the activities are practiced, the more developed is the capability. For low values of market orientation information system the absorbing capacity will be too low to understand important traits of customers and competitors. Although the firm may learn about markets at low levels of market orientation, a firm will probably not benefit from low market orientation since the value of the market offering is relative to competitors. For higher values of market orientation, a firm may be able to understand the market to innovate and position its products successfully. Since markets are evolving, and due to the requirement of a certain level of absorbing capacity, the organization will benefit from updating its knowledge continuously. The impact of market orientation on market performance is thus believed to be progressive.

Market orientation information system is a combinative capability regarding the use of market orientation resources for conducting the market orientation activities. For the organization to become market oriented the firm needs to accomplish both market information generation, dissemination and responsiveness. Only when there is a balance among the three dimensions of market orientation information system does a high level of market orientation capability exist. Accordingly, market orientation capability can be argued to be reflected by market orientation as syndrome. Following the common interpretation of the word syndrome,

the market orientation information system syndrome is defined as a group of symptoms that together are characteristic of a specific condition. The group of symptoms are equality of the values for each of the market orientation information system dimensions (generation, dissemination, responsiveness) and the condition is market orientation information system capability. Different levels of market orientation capability are thus viewed as equal to different levels of market orientation as syndrome.

The next chapter explores some dynamic and static aspects of the market orientation capability. Particularly, the ability to revise the organization's market orientation information system and its domain is central to the discussion in the next sections.

### **3.3.2 Market orientation as exploration vs. exploitation**

The previous chapter holds that a market orientation information system will improve the organization's market absorbing capacity, and thus, perform its market decisions more successfully. This effect was even speculated to be progressive. This chapter argues that high levels of absorbing capacity may not prevent the organization from a market orientation myopia. Accordingly, market orientation information system is only one part of market orientation learning capabilities. Another aspect is the phenomenon of market orientation exploration and market orientation exploitation, which will be elaborated in the subsequent sections.

Exploration is associated with the discovery of new possibilities, and includes terms such as search, risk taking, experimentation, play, flexibility, discovery, and innovation. On the other hand, exploitation is about old certainties, such as refinement, choice, production, efficiency, selection, implementation, and execution. The trade-off is explained by March (1991:71) to be:

Adaptive systems that engage in exploration to the exclusion of exploitation are likely to find that they suffer the costs of experimentation without gaining many of its benefits. They exhibit too many undeveloped new ideas and too little distinctive competence. Conversely, systems that engage in exploitation to the exclusion of exploration are likely to find themselves trapped in suboptimal stable equilibria. As a result, maintaining an

appropriate balance between exploration and exploitation is a primary factor in system survival and prosperity.

The reason for the trade-off or balance is scarce resources. Exploration of new alternatives (e.g., market segments, products) decreases the speed with which skills at existing ones are improved (March 1991:72). On the other hand, improvements in organizational competence associated with existing procedures make exploration of others less attractive. An organization may see many areas of improvements for current segments in the short run. In contrast, experiments in new markets are associated with uncertainty with respect to outcome and consequence for implementation (e.g., competence). Consequently, many organizations may find exploitation and minor experimentation in current segments to be more attractive. The outcomes of exploitation are less uncertain, closer in time, and closer to current actions and competence. Accordingly, such mutual learning (as results from exploitation) leads to convergence between organizational and individual beliefs in the form of organizational routines and common knowledge, and thus, variability of performance is reduced (March 1991:83).

Learning can be seen as nested. Learning in one area is effectively a substitute for learning in another (Levinthal and March 1994:101). For example, refining an existing product for current market segments substitutes for inventing a new one for new market segments, and vice versa. Rapid adaption to markets might reduce the need for, and likelihood of, adaption to other segments<sup>8</sup>. The trade-off between exploitation and exploration may imply two areas of consideration, that is, market orientation domainwidth and market orientation means alteration.

*First*, the domainwidth of market orientation represents the trade-off between a narrow market orientation versus a broad market orientation. The narrow market orientation is defined as the convergence of the principally served market and the domain of market orientation. In contrast, a broad market orientation is defined as the positive difference between the domain of market orientation and the principally served market. The latter form may lead to the development of knowledge about new segments that causes market experiments. Moreover, experiments are also part of the process of generating information.

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<sup>8</sup>The original theory is about fast and slow learners (Levinthal and March 1994). An illustration of the theory is parents who are particularly fast in adapting to their children's needs, reduce the pressure on the latter to be adaptive, resulting in lack of socialization in children of highly adaptive parents.

Consistent with March (1991), a broad market orientation may lead to more risky market behavior (e.g., wasted information generation, market entry failures), and may generate profit first in the long run. The narrow form of market orientation is a way of capitalizing in a market where the firm has its current competencies with respect to market knowledge and production knowledge. Accordingly, the firm can behave more steady in such market(s), and thus, the risk is lower, and the firm can profit in the short run.

However, markets are not static (Dickson 1992). New markets will evolve and current markets will decline. Competitors will enter new markets with new technology and through new alliances and will use new forms of incentives that motivate the customers to redefine the boundaries of and among industries (for example, consider the new boundaries among telecommunication, information technology, and media). Accordingly, being too focused on current and potential customers and competitors in current market segments may be destructive in the long run. However, being too focused on new segments may lead to loss of the position, and the profit, in current segments. As March (1991) argues, the firm has to balance exploitation and exploration. With respect to market orientation, over time, firms conducting a narrow market orientation domain may experience poor market performance because of lack of long-term adaptability. Similarly, a company that conducts a broad market orientation domain may experience poor market performance because it never exploits its current innovations to achieve superior market performance. Somewhere in between broad and narrow market orientation domain the superior market performance may be found. Such balance between a broad and a narrow market orientation domain enables the firm to explore new market opportunities and threats (outside its principally served market) as well as to exploit the situation in the firm's principally served market. Accordingly, the relationship between market orientation domainwidth and performance is expected to look like an inverse U-form.

*Second*, it can be distinguished between a core set of knowledge structures and peripheral knowledge structures (Lyles and Schwenk 1992) to give content to market orientation means alteration. The *core set of knowledge* structures represents common beliefs and goals on which there is a widespread agreement within an organization. With respect to market orientation, the core set of knowledge concerns to which degree the individuals perceive that decisions regarding the market should rely on revised and accurate market knowledge, and to which extent it is a goal of the organization to produce and disseminate

such knowledge through its members. The core set is a function of consensus through social interaction and thus can be viewed as an equivalent to organizational culture (Desphande, Farley, and Webster 1993).

*Peripheral knowledge* structures is about how to achieve the expectations represented in the core set, that is, means-end beliefs that interrelate the core set to actions (Lyles and Schwenk 1992:162). In other words, peripheral knowledge structures contain knowledge about subgoals and about activities appropriate to accomplish them. A particular firm's market orientation consists of knowledge associated with how to gather data about customers and competitors, how to disseminate data, and how to utilize information and knowledge for decisions. Moreover, the organization will also have a set of beliefs associated with the resources needed to conduct certain market orientation activities. In contrast to the core set of knowledge structure, the peripheral knowledge structures represent the exploration-exploitation trade-off. Market orientation is divided into activities which are carried out through the use of different firm resources (e.g., organization members) which are interrelated and constitute the system of market orientation (i.e., market orientation learning capabilities). Following Simon (1991) and Weick (1979), coordination of resources and activities will be difficult without it until some agreement as well as common knowledge can be reached.

Due to the division of labor and turnover of personnel within firms, a variety of individual mental models develop and this will cause the development of a variety of knowledge structures at the peripheral level. Two firm strategies for peripheral (market) knowledge structures may be identified. The first strategy holds that the company may try to make consensus among its members (i.e., resources) regarding the way market orientation information activities are done within the company. Another strategy may be that the company facilitates a continuous discussion regarding how market orientation may be changed and applied differently for different markets, products and situations, which is labeled market orientation means alteration. The first strategy is an exploitation strategy, while the latter is an exploration strategy.

The consensus strategy is considered by March (1991) in which mutual learning within an organization (group think) leads to convergence between organizational and individual beliefs regarding market orientation. Although there will never be a perfect convergence (Simon 1991), a consensus strategy also implies the 'knowledge substitution effect', in which the organization through its leaders and formal systems has the power to give direction about

the present and future market orientation activities of the firm (cf., Conner and Prahalad 1996). The knowledge substitution effect, over time, may cause a high degree of common perceptions (beliefs) among organization members about how to conduct market orientation resources and activities. The benefit is low internal coordination costs (Lyles and Schwenk 1992; Conner and Prahalad 1996). Convergence maximizes market orientation learning capability exploitation.

If the company allows or facilitates the use of time and effort to discuss alternative ways to learn about markets and utilize market information and knowledge, the costs of being market oriented will increase due to the increased time used on discussions and coordination (e.g., coordination by consensus). Moreover, if the organization allows the organization to experiment with alternative ways, the risk of failures associated with internal as well as external maladaptation is expected to increase. For example, it is likely that new ways of gathering, disseminating, and using market information will not always be better than the present ones, and thus, such learning experiments will sometimes fail and sometimes turn out to be successful.

Market orientation means alteration may also be viewed as functional conflicts which are argued to be important to facilitate because 'they prevent stagnation, stimulate interest and curiosity, and ... may increase productivity' (Morgan and Hunt 1994). The results of a low amount of exploration might be a more narrow set of market orientation resources along with the perseverance effect (Lyles and Schwenk 1992; Selnes and Wesenberg 1993). The latter effect implies that the organization will ignore signals that contradict the value of current practices. If the organization does not emphasize exploration, the organization might suffer in the long run.

The chapter holds two different aspects of market orientation exploration and exploitation. Market orientation exploitation is the static strategy that may be used to maximize the effect of current market orientation practice. Market orientation exploration is the dynamic strategy in which the firm tries to look for, or change, current market orientation practices (i.e., market orientation activities and the use of market orientation resources). The exploration strategy is more risky and will sometimes entail losses and inefficiencies. Too much experimentation will prevent the organization from capitalizing on activities and resource use that seemingly work.

Exploration and exploitation are viewed as extreme points of the same variable (March 1991). In general, a firm has to balance exploitation and exploration, where the effect of exploration, or exploitation, on performance is believed to be possibly inverse U-shaped. The chapter concludes by arguing that there might be two kinds of market orientation exploitation vs. exploration capabilities: market orientation domainwidth and market orientation means alteration. Both aspects are believed to follow the inverse U-shaped effect on performance.

The next sections discuss to which degree tacit knowledge applies to market orientation and the role it may play in the capability-based theory of market orientation.

### **3.3.3 Market orientation capability as tacit knowledge**

In Chapter 3.2., it was argued that a theory of market orientation as dynamic learning capabilities should imply a tacit dimension to become a strategic capability and a contribution to sustained competitive advantage since it can be hard to imitate by competitors. This section attempts to explore why, and how market orientation can benefit from being tacit.

The suggested importance of tacitness raises the implication that market orientation capabilities should be examined for its degree of tacitness. Different firms may have different degrees of tacitness associated with their market orientation capabilities. From resource-based theory, market orientation is a superior capability if it has a considerable tacit element, particularly because such capabilities are costly and difficult to imitate. Tacit knowledge is the body of common knowledge within the organization. Such common knowledge is embedded in routines, often taken for granted by the people working in the organization (Nelson and Winter 1982). Routines are patterns of social interactions that take place inside the organization. Such social interactions cannot possibly be fully codified, and thus, are partly tacit by nature. Consequently, a market orientation capability may be difficult and costly for competitors to imitate, and thus, expected to be an important contributor for sustained competitive advantage.

For market orientation to be characterized as tacit, or to have some degrees of tacitness, four dimensions of tacit knowledge may be applied to considering to which extent the market orientation capabilities may be tacit (cf., Zander and Kogut 1995; Nelson 1991).



*Lack of codifiability* refers to the degree to which market learning and exploitation can be encoded (e.g., manuals, extensive documentation). *Lack of teachability* refers to what extent the employees can learn about the firm's market orientation through increasing their own skills through formal education and/or talking to skilled employees. *Complexity* is the number of interacting elements underlying the firm's market orientation. A company that has an organizationwide information generation, informal and formal information dissemination and uses the information for decision purposes is associated with high complexity for its market orientation. The more elements that have to be integrated to become market oriented, the more difficult for competitors to imitate all of them. *System dependence* captures the degree to which market orientation is dependent on many different groups of experienced people for its fulfillment. The more the market orientation is embedded in many individuals (with different skills) and resources the more difficult it is to gain access to the drivers of the market information processing activities. Market orientation with low codifiability, low teachability, high complexity, and high system dependence represents a capability which is highly tacit. In other words, market orientation is tacit when the organization knows more than each of the individuals can tell, and thus, has low ability to provide an accurate description and explanation of the procedures in a skillful performance (cf., Polanyi 1966).

Market orientation is believed to work most efficiently when it is performed as a tacit routine. So doing, most members of the organization know how market orientation resources can be used (e.g., they know who knows what) to perform market orientation activities. In other words, market orientation is embedded in the organization's scripts and way of thinking. The members of the organization may be conscious about the market but make use of tacit scripts guiding the individual and collective behavior regarding the effort toward performing market orientation activities. The organization benefits from a tacit market orientation capability in which it releases cognitive effort.

The impact of market orientation tacitness on performance is, in general, argued to be positive. Tacit knowledge is widely distributed and accepted and is represented by the organization's common knowledge (i.e., scripts and schemes). New members of the organization will, gradually, be socialized into the tacit knowledge through 'on-the-job-training', imitation, feedback, sanctions, etc. To become efficient, the organization needs some amount of common knowledge about market orientation. Following Simon (1991) and Weick (1979), coordination will be difficult until some tacit knowledge can be reached.

Consequently, the amount of tacit knowledge associated with market orientation affects how smoothly and efficiently the organization conducts its market orientation activities. Tacit market orientation enables the organization to release resources associated with market orientation activities. Such a release should, *ceteris paribus*, enable the organization to perform better (Penrose 1959). The released resources may be reinvested in market orientation activities or in other activities of the firm for activities supporting a market-driven organization (e.g., technology development, cost reductions).

If successful market performance is to be sustained and not imitated immediately, the drivers of the performance should be difficult to imitate. If market orientation learning capabilities are drivers of market performance, which is argued to be the case in the previous chapters, the tacit-dominated market orientation should enable the company to hold the market advantage for a longer period of time. Accordingly, market orientation tacitness is valuable since it enables the market learning and market knowledge exploitation to work smoothly and efficiently (von Hippel 1988; Teece, Pisano and Shuen 1997) and is costly to imitate (Kogut and Zander 1992; Zander and Kogut 1995). It is believed that a market orientation capability that is tacit has a performance advantage over the market orientation with less tacitness.

### 3.4 CONCLUSION

Chapter 3 extends the conceptualization of market orientation from Chapter 2 that was based on the current market orientation literature. Here, market orientation is viewed as the firm's market learning capabilities. Such a view integrates the resource- and capability perspective and organizational learning theories, and thus, is an attempt to accomplish the need for progress in further development of a theory of market orientation addressed in Chapter 3.1.1.

The current conceptualization of market orientation is relabeled market orientation information system capability, and is the capability that facilitates the organizationwide market information generation, dissemination and responsiveness activities through the use of firm resources. The information processing activities are necessary for the firm to learn about markets and exploit such information and knowledge in its decisions. As markets evolve there is assumed to be a continuous need for revised and accurate market knowledge, and thus, companies compete based on resources (e.g., market knowledge) and the capability to produce and exploit market knowledge because of the need for continuous market innovations. The new focus on market orientation information system as a firm capability for coordination and consideration of the three core organizationwide market information processes may accomplish the critique of the current focus on information activities in the literature (cf. Chapter 3.1.1). The learning capability for acquiring, developing, coordinating and exploiting firm resources in market orientation information activities may overcome the current constraints of the quality of the three core processes and the interaction among them.

In addition to holding a capability which generates and exploits organizationwide market knowledge, the firm may also benefit from a capability that facilitates the utilization of information in segments outside its currently served market segments. Seemingly peripheral market segments may contain useful information about threats and opportunities that can be applied on the firm's current segments and it may be useful for the firm to discover new segments where the firm can compete. This capability is labeled market orientation domainwidth. Lack of such capability may lead the firm to a market orientation myopia and may be of negative value for the firm in the long run. Instead, the market orientation domainwidth capability may meet the need of matching the market learning with changing boundaries among markets and segments as well as exploring new possibilities (and threats)

that occur in markets outside the firm's current target. Such capability is sought after in the market orientation literature to prevent market orientation from market myopia.

Old certainties may not be valid in the present and the future. The firm's capability to renew its way of learning and exploiting the learning for decisions is perhaps of equal value as holding a market orientation information system capability. The attractiveness of a smooth market orientation information system capability may lead the firm to maintain its current practices. However, the competitors may offset the value of many elements of the firm's learning process through imitation and duplication. The customers may also change leading the firm to benefit from new approaches to explore their preferences and needs. The firm's considerations and experimentation with its market learning and learning exploitation is believed to be valuable to the firm and constitutes the firm's market orientation means alteration capability. This capability accomplishes the need for an extension of market orientation to meet the need of assessing and changing the firm's use of its resources to perform market orientation activities.

The fourth learning capability is market orientation tacitness. Tacit market orientation occurs when the learning activities become embedded in the organization's routines through social interactions and experience. Such internalized knowledge is more difficult to imitate by competitors and enables the firm to perform its resource use and information processing activities more smoothly, and thus, more effectively. A tacit market orientation capability is thus more valuable to the firm and causes a sustained competitive advantage. This capability has not yet been identified within the market orientation literature and contributes to an extension of the concept where a mechanism for imitation difficulty is added.

Next chapter deals with the impact of four market orientation learning capabilities on firm performance. In contrast with this chapter, the discussion is targeted towards specific effects of market orientation, both direct and indirect ones. The purpose is to develop a theory of the consequences of the different aspects of the market orientation capabilities. The hypotheses are based on relevant marketing literature and empirical findings regarding studies of the effects of market orientation, in addition to the framework established in this chapter.

# **MODEL AND HYPOTHESES**

*The marketing concept is so ubiquitous in the marketing classroom that the naive student of marketing is generally led to believe that firms who fail to employ this philosophy are business criminals.*  
(Jolson, 1978)

The purpose of the chapter is to develop the hypothesized model for the study of the effects of market orientation. In chapter 3 the general effect of market orientation as a dynamic learning capability on organizational performance was discussed. Chapter 4.1 starts with a discussion of the multiple facets of organizational performance to identify the kind(s) of performance which market orientation may affect. Accordingly, the first part of the chapter elaborates on the concept of organizational performance and the distinction and relationship between efficiency and effectiveness. Based on the interdependence between efficiency and effectiveness, a conceptual model for the study is outlined. The conceptual model approaches the effects of market orientation to be like a means-end chain. Firm efficiency is viewed as a consequence of market effectiveness, and market effectiveness as a function of market orientation learning capabilities.

Furthermore, the conceptual model is broken down into a fine-grained network of direct and indirect effects of market orientation capabilities. The direct effect of market orientation is considered to be on product adaption. Chapter 4.2 contains a definition of the concept of product adaption and a discussion of the impact of market orientation learning

capabilities on product adaption. Following the discussion of market orientation learning capabilities in Chapter 3, four hypotheses are suggested in Chapter 4.2.

In order to consider to which extent market orientation might be of unequal value to all kinds of companies, Chapter 4.3 continues with the moderating role of competitive strategy on the effect of market orientation learning capabilities on product adaption.

Moreover, Chapter 4.4 proceeds with the impact of product adaption on the other kinds of market effectiveness included in the study and the most likely pattern of effects among the other kinds of market effectiveness variables and firm efficiency (i.e., profitability).

Eventually, chapter 4.5 presents all the direct and indirect effects of market orientation in a hypothesized model. This model frames the theory of the effects of market orientation, which is the purpose of the study.

## **4.1 A CONCEPTUAL MODEL OF MARKET ORIENTATION AND PERFORMANCE**

The chapter attempts to develop a framework for the study of the effects of market orientation. Different kinds of performance are identified in the literature. Thus, the first part of the chapter deals with the organizational performance concept to consider the relationship between efficiency and effectiveness. The chapter continues with a discussion on how market orientation learning capabilities may affect organizational performance. The conceptual model of market orientation and performance makes a distinction between direct and indirect effects of market orientation on the different kinds of performance.

### **4.1.1 The concept of firm performance**

The current literature has explored the effects of market orientation without too much attention towards how the different kinds of performance are interrelated (Jaworski and Kohli 1993; Narver, Slater, and Jacobson 1993). As Kotler (1994) argues, market orientation affects ultimate firm performance, such as profitability, through a means-end chain of market performance. In more specific terms, market orientation may be viewed within the efficiency-effectiveness framework of organizational performance. So doing, restrictions can be made on the pattern of the effects of market orientation, which is consistent with the organizational performance literature, and the main arguments will be discussed below. The subdimensions of performance are efficiency and effectiveness (Cummings 1983; Simon 1964). Each of the two dimensions will be described and discussed in the next sections.

#### **4.1.1.1 Efficiency**

Efficiency may be viewed as the ultimate kind of performance and is the relative outcome of allocations of resources. Efficiency deals with the outcomes the organizations

generate with their resources, and can be defined as "an economic index of the ratio of measured inputs to measured outputs" (Cummings 1983:198). Efficiency is, then, an index of value added by a company (Duhan 1984; Hofer 1983). The greater the discrepancy between output and input of a firm, the higher the efficiency of a firm. Several approaches can be applied to identify this index (see, e.g., Hofer 1983 for a review). However, for the purpose of research in marketing and strategy, the various approaches to efficiency are mostly centered around profitability, and thus, profitability is the most commonly used definition of business performance in strategy research (Venkatraman and Ramanujam 1986:803; Kanter and Brinkerhoff 1981:323; Hofer 1983). Profitability can be viewed as "a particular case of efficiency where the economic index is assessed through return on  $x$ ; where  $x$  can be any number of input constructs" (Cummings 1983:198). Since profitability is a measure of variants of {output - input}, it is an adequate measure of efficiency. Typical measures of profitability (and efficiency) are gross margin, net profits/dollar sales, return on equity (ROE), return on assets (ROA), return on investments (ROI), and return on value added (ROVA) (Hofer 1983; Narver, Jacobson and Slater 1993). Following Narver and Slater (1990), profitability will be used as the representation of efficiency in this study.

Efficient resource exploitation refers to a resource allocation in which there is no other available allocation that makes the organization better off (Milgrom and Roberts 1992:23). In other words, the resources should be used in the process that generates most revenue. This relative approach to efficiency is relevant to explain why profit maximization is used as a criterion of efficiency (Milgrom and Roberts 1992). For most organizations, and according to financial theory the objective of the firm is to maximize shareholder value, that is, profitability (Doyle and Hooley 1992:59). Moreover, the firm's profitability is an important criterion of performance since it also can affect the economic reward of managers and employees. Consequently, for the purpose of studying the effects of market orientation within the resource-based perspective, possible contributions from market orientation to profitability would be of interest to identify (cf., Teece, Pisano, and Shuen 1997; Hansen and Wernerfelt 1989). Next sections discuss the difference and interrelationship between efficiency and effectiveness.



#### 4.1.1.2 Effectiveness

According to Day (1990:33), profitability is "the outcomes - not the determinants - of performance and cannot be managed directly". This also means that profitability has little relevance to most parts of the organization, because it is difficult to see how the day-to-day actions and decisions influence the financial results. Similarly, Simon (1964) makes a distinction between goals and constraints. Constraints are requirements that have to be satisfied in order to fulfill the (finite) goal. Furthermore,

".. this does not mean that it is improper or meaningless to regard profit as a principal goal of the business. It simply means that the decision-making mechanism is a loosely coupled system in which the profit constraints is only one among a number of constraints and enters into most subsystems only in indirect ways. It would be both legitimate and realistic to describe most business firms as directed toward profit making - subject to a number of side constraints - operating through network of decision-making processes that introduces many gross approximations into the search for profitable courses of action." (Simon 1964:21-22)

Following Simon's argumentation, there may be something (i.e., constraints) in between market orientation capabilities and efficiency. Accordingly, it may be useful to focus on effectiveness, a performance dimension that goes beyond the "black box" approach associated with the use of profitability as performance measure (Venkatraman and Ramanujam 1986:803-804). If an organization uses efficiency as a dominating goal for their decisions it can lead to a bias toward short term cost control, aggressive selling, lack of investments, market experiment aversion, etc. For example, Anderson (1982:22) argues that the firms' emphasis on efficiency (e.g., 'ROI-control') decreases its long-term focus on customer need satisfaction. Therefore, effectiveness should be used in addition to the focus on efficiency and profitability in the examination of the effects of the four market orientation learning capabilities. Moreover, constraints and effectiveness are viewed as being equal, and may be useful to gain insight into how the different kinds of effectiveness lead to profitability and efficiency.

Effectiveness (and constraints) have a broad scope of standards that should be met for the organization to become profitable. For an organization to be effective it "must be concerned with showing that performance meets the standards that external and internal constituencies monitor" (Cummings 1983:198). Accordingly, for market-dependent

organizations, the organization's success relies on how well the organization meets the interests of external constituencies:

The effectiveness of market-controlled organizations is directly determined by their customers: if their interests are satisfied, then they will continue to supply the inputs required by the organization; if not, then they can withhold their contributions, causing the organization to suffer and perhaps ultimately to fail. Under ideal market conditions an organization's output goals and system-maintenance goals are tightly linked. (Scott 1992:349)

Consequently, the most important aspect of the organization as a market organization is its attention to the external environment. In this study there has been made a limitation of the external (coalition) domain to solely focus on customers and competitors (for a discussion, see Chapter 2).

Effectiveness criteria relevant to market orientation can be of many different kinds (Day 1990; Kotler 1994). Some frequently used (and emphasized) effectiveness criteria in marketing are sales growth and market share (Buzzell, Gale and Sultan 1975), brand loyalty (Jacoby and Chestnut 1978), customer satisfaction (e.g., Fornell 1992; Oliver 1997), product quality (Zeithaml 1988), product superiority (Cooper 1994), brand reputation (Darby and Karni; Aaker 1991), innovativeness (Desphande, Farley and Webster 1993), product innovation performance (Moorman 1995), and price premium (Venkatesh and Mahajan 1997). The different kinds of effectiveness, listed above, are believed to capture important aspects of the company's market performance, contrary to its efficiency. Accordingly, the different kinds of effectiveness are not necessarily independent of each other, and thus, there may be a causality among the different kinds of effectiveness. Such considerations will be discussed later in this chapter.

Consistent with the proposed impact of the customers and competitors on the firm's efficiency in the organizational performance literature (e.g., Scott 1992) and market orientation literature (e.g., Narver and Slater 1990), this study attempts to develop a conceptual model for the study of the effectiveness and efficiency of market orientation. Such a model will be presented in the following chapter.

#### 4.1.2 The conceptual model for the study

The marketing management literature (see, e.g., Kotler 1994; Dickson 1992; Hunt and Morgan 1995) holds profitability as a relevant finite objective of marketing and market orientation. Although most studies of market orientation propose market orientation to have a direct effect on profitability (for a review, see Appendix 1), virtually all arguments found in the literature for the linkage between market orientation and profitability are based on some mediating effects. Such proposed mediating effects are 'superior value to the customers', 'satisfied customers', 'customer loyalty', 'developing better products', etc. (see, e.g., Narver and Slater 1990; Kohli and Jaworski 1990; Jaworski and Kohli 1993; Deshpandé, Farley and Webster 1993; Slater and Narver 1995). Consequently, profitability can be viewed as the reward of, for example, satisfied customers and customer loyalty, and not as an effect of market orientation *per se*. Profitability can be an inappropriate index of the performance of market orientation, because too many processes intervene between market orientation and profitability.

The discussion in Chapter 4.1.1 suggests that a study of the effects of market orientation may have an indirect impact on efficiency since efficiency, in this case, is a function of market effectiveness. In the market orientation literature, efficiency is represented by profitability, a representation that is widely held as important to business firms. To be better able to explain the relationship between profitability and market orientation learning capabilities, a set of market effectiveness variables will be added to the study.

Market orientation is about the firm's generation and use of market knowledge. Knowledge about the market is not an objective in itself, but acts as a means to meet the knowledge requirements for each of the organization's market related decisions. Relevant to market orientation, decisions regarding market treatments (i.e., the 4 P's) should benefit from market orientation learning capabilities. Using knowledge about the market the market treatments are believed to be better adapted to the customers' preferences and the competition. In other words, it is believed that the market orientation learning capabilities 'work' through the performance of market treatments.

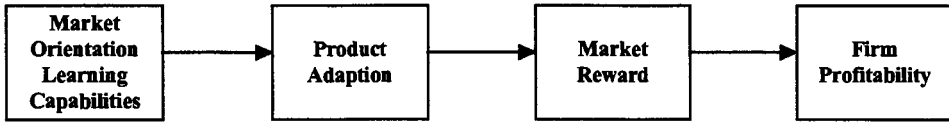
Both marketing and organizational science make an effort to explain firm adaption. In marketing, the firm's adaption of its price, distribution, promotion, and products to the different market segments are of special interest. Although market orientation may affect the

performance of all these market treatments, product adaption is usually approached as the most critical area of firm adaption (Deshpande, Farley and Webster 1993; Peter and Olson 1996; Oliver 1997). The ability to innovate and provide products to the market that are successfully adopted is considered to be an important performance factor for the firm (see, e.g., Porter 1990; Teece 1987; Grønhaug and Kaufmann 1988; Deshpandé, Farley and Webster 1993; Cooper 1994; Moomman 1995). Moreover, the effect of market orientation on product adaption has for long been of interest (e.g., Lawton and Parasuraman 1980). Some researchers argue that market orientation has only a limited contribution to product adaption (Bennett and Cooper 1979; 1981; Lawton and Parasuraman 1980), while others argue that it encourages the firm's ability to provide superior products to the market on a continuous basis (e.g., Day 1990; Narver and Slater 1990; Kohli and Jaworski 1990). Moreover, it may be appropriate to approach distribution, price and promotion as surrounding the product offering, and thus, framing the product as the core of the firm's offering (Peter and Olson 1996). Accordingly, product adaption is chosen as the potential effect that is directly related to market orientation learning capabilities.

The framework for the study is outlined in Figure 4.1. The model indicates that market orientation capabilities affect the product adaption in the market. Product adaption affects how the market rewards the company, which, in turns, affects firm profitability. The model is consistent with the firm capabilities literature where 'winners in the global marketplace have been firms that can demonstrate timely responsiveness and rapid and flexible product innovation, coupled with the management capability to effectively coordinate and redeploy internal and external competences' (Teece, Pisano, and Shuen 1997). In other words, the market orientation learning capabilities enable the company to provide superior products, in which effectiveness is reflected. Moreover, the reason why the products should be adapted to the market is due to aspects in which the customer might want to buy such products (i.e., sales increase), and how much the customers want to pay for the product. Both sales growth and relative price (i.e., price premium) are expected to be important causes of profitability. Sales growth may affect profitability through economies of scale and price through higher gross margins (Porter 1980). The model in Figure 4.1 presents a model in which profitability is caused by two kinds of market effectiveness, product adaption and market reward, and where the driver in the model is the market orientation capability.

**FIGURE 4.1**  
**The conceptual model for the study**

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The next parts of Chapter 4 contain discussions of the impact of market orientation learning capabilities on product adaption (cf., Chapter 4.2). The moderating role of business strategy on the impact of market orientation on product adaption is elaborated in Chapter 4.3. Furthermore, Chapter 4.4 includes a discussion of the indirect effects of market orientation, that is, the effect of product adaption on market reward variables, the relationships among market reward variables, and the effect of market reward variables on firm profitability. The conceptual model in Figure 4.1 is followed up by a more fine-grained model in Chapter 4.5. This model contains the constructs and the hypotheses covered in Chapters 4.2-4.4.

## **4.2 THE DIRECT IMPACT OF MARKET ORIENTATION LEARNING CAPABILITIES ON PRODUCT ADAPTION**

Following the conclusion of Chapter 4.1, product adaption was expected to be the direct consequence of market orientation. This chapter attempts to explain the effect of market orientation learning capabilities on product adaption. First, the construct of product adaption is defined. Second, the impact of market orientation learning capabilities on product adaption is discussed. The chapter contains a consideration about the expected impact of the four learning capabilities of market orientation capability defined in Chapter 3.

### **4.2.1 Defining product adaption**

The direct consequences of market orientation learning capabilities are restricted to product adaption. Product adaption can be seen as how the firm's product(s) match the customers' preferences and the competition. Following Cooper (1994:61), product adaption will be defined as *to which degree the products have unique benefits and product value to users*. This definition covers two important aspects of product adaption. Products should fit the preferences of the customers, and thus, provide value to the users. Additionally, the products should be unique to overcome the competition since all value is a matter of comparative value.

The problem of product value to users is how quality is being defined. Product quality, as the assessment of attributes of a product (Oliver 1997; Troye and Henjesand 1992), is in the eye of the observer, that is, the customer, rather than an objective, immutable characteristic of the product being perceived. What is important to the customer, is not what experts might consider to be of high quality, but what the customers themselves find desirable (Troye, Øgaard, and Henjesand 1995). Accordingly, product quality that does not provide product value to users will not be possible. The ability to match products with the customers' preferences, needs, and price/performance perception is viewed to constitute one part of product adaption.

The other aspect of product adaption is that a product should be unique to be successfully adapted to the market. Being unique means that the product(s) contain benefits or a price/performance ratio which are better than what the competitors offer. Accordingly, product adaption is the function of product value to users and uniqueness compared to competitors (Cooper 1994).

What makes product adaption an important consequence of market orientation is its dynamic nature. As the customers' preferences and the competition change, the company will not be able to provide superior products or to accomplish product adaption without product innovations (cf., Dickson 1992). Therefore, product adaption may be viewed as the result of product innovation. Such an approach is argued to be consistent with the literature on new product innovation performance (e.g., Cooper 1994; Moorman 1995).

The performance of product innovation can be approached through two dimensions: timeliness and creativity (see Moorman 1995:323-324)<sup>9</sup>. *New product timeliness* is "the extent to which new products are introduced during environmental conditions that promote their success". This aspect is very critical, particularly for products that have a long development process or the market is evolving rapidly (von Hippel 1988). Timeliness deals perhaps mostly with the case of a comparative advantage regarding competitors. Most competitors are striving towards the attractive segments, and thus, providing superior products before the competitors do is a way to accomplish successful product adaption (Dickson 1992; 1996). The second dimension, *new product creativity* is "the degree to which a new product is novel and its introduction changes marketing thinking and practice" (Moorman 1995:324). Although this dimension also contains a comparative advantage perspective, it implies launching a product which is new to the market, and perhaps, contains better value to the customer. Furthermore, new product creativity may also be viewed by using Robertson's (1967) typology of product innovations. Doing so, a product innovation can be classified as either incremental or break-through. An incremental product innovation builds on prior work and improves an already existing product. In contrast, a break-through product innovation strikes new ground and changes the way things are done. Accordingly, using Moorman's dimension, a break-through may be a high value for the variable, while an incremental innovation represents a modest or

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<sup>9</sup> In addition to the two dimensions, Moorman also includes performance. Performance is "the degree to which organizational goals involving new product profit, sales, and market share have been reached" (Moorman 1995:323). However, to analyze further effects of product adaption, for example, market share and profitability, performance is approached as a redundant dimension of product innovation performance (see Singh 1991).

low value on the variable (Cooper 1994). The ability to innovate in a way that brings novel products in due time to the market is an important but insufficient condition for product adaption. Using Moorman's performance dimensions, she does not consider the new product's ability to meet the customers' preferences. Nor does she consider to which extent an incremental innovation may be of equal value as a break-through innovation.

The current perspective on product development performance and innovation is either performance free (cf., Deshpande, Farley, and Webster 1993) or at the project level (Cooper 1994; Moorman 1995; JMR Special Issue on Innovation and New Products 1997). None of these perspectives are appropriate to approach product adaption and market orientation. Market orientation is a concept at the business level where the set of market orientation learning capabilities is a driver of all market activities. Consequently, market orientation is a driver of the entire set of product development activities. On the other hand, product adaption was defined in the beginning of the chapter to contain product value to users and unique attributes not available from competitors. Accordingly, it makes no sense that any innovation is consistent with better adaption to the market. Many innovations, also of those which are break-throughs, fail in the marketplace (Cooper and Kleinschmidt 1993; Urban and Hauser 1993). Aspects like product development costs, risk of failure, diffusion inertia, and lack of imitation protection (see Urban and Hauser 1993; Gatignon and Robertson 1985; Barney 1991) make innovation not necessarily a contribution to organizational performance. Accordingly, innovations might be viewed as a means to become adapted to the market. A market oriented firm may have its strength in that it can see when and how to innovate to provide products that will fit the market. This view is consistent with the previous studies of the effects of market orientation. The studies by Slater and Narver (1994) and Greenley (1995a;b) use the term 'New product success' as a relevant consequence of market orientation.

In this research, product adaption is viewed as the company's ability to deliver unique benefits and product value to users. However, product development performance and innovation play an important role in accomplishing product adaption, and thus, serves as an important part of the rationale for the market orientation-product adaption relation. Additionally, being market oriented does not mean that the company should innovate and change the products all the time. Instead, a market orientation capability may provide the company the opportunity to more consciously identify areas of product improvements as well as areas of product 'maintenance'. Market orientation is the driver of interest and the impact of



market orientation learning capabilities on product adaption will be elaborated in the next sections. The first learning capability that will be considered is the market orientation information system.

## **4.2.2 The impact of market orientation information system on product adaption**

The focus of this chapter is to consider how market orientation information system as defined in Chapter 3 may facilitate, or impede, the company's attempts to offer superior products to the market. The discussion of the hypothesis is divided into two parts. The first part (4.2.2.1) contains a review of the studies and the literature that have considered the impact of market orientation information system on product adaption. The results from the review and the theoretical arguments from Chapter 3.3 are presented in Section 4.2.2.2 in order to develop the hypothesized effect for this study.

### **4.2.2.1 Previous studies**

The specific effect of market orientation information system on product adaption has been dealt with in the marketing literature. It has been argued that market orientation will be an efficient means of augmenting the process of providing superior products to the market (e.g., Greenley 1995a;b; Slater and Narver 1994; Kotler 1994). Market orientation can be useful because it enables the organization to identify market opportunities and threats that can affect the performance of current and new products. For example, market trends, competitors' plans and behavior, and customers' preferences are believed to affect the performance of product innovations (Urban and Hauser 1993). Moreover, speed is also an important factor here. Knowing more about the markets before the competitors enables the company to offer products that have a comparative advantage. Consequently, firms that are used to processing external information are generally more proactively adaptive to their environment in the product development process (Dickson 1992:76), and firms that analyze markets

comprehensively are more often adding new competitive features (McDaniel and Kolari 1987; Dickson 1992:74).

The dissemination of information and coordination of knowledge within the organization is a central trait of a market orientation information system. It is important to establish an intraorganizational nexus for the market information and market knowledge for the market learning to take place at the organizational level and not only be restricted to local learning. So doing, the information and knowledge will be less biased since there are multiple sources of information and interpretations (Simon 1991). In a similar way, the use of cross-functional teams are found to be important to facilitate the product development process (Cooper 1994; Urban and Hauser 1993). The use of such teams improve the performance of the new products as well as less time being spent on the project since more of the processes can be parallel (in contrast to sequential). The iterative process among people from different positions in the company speeds up the learning process (e.g., more constraints and possibilities become known in the process of developing products at early stages), increases the performance of the new products, and reduces the likelihood of new product failure.

In the literature a distinction is often made between incremental and break-through innovations. Accordingly, offering superior products to the market can be done through maintaining and polishing existing ones or by making entirely new products, so-called 'new to the world' (Robertson 1967). If a market orientation information system facilitates both kinds of innovation, market orientation will most likely contribute significantly to product adaptation. However, the literature does not agree about such general effect of market orientation on the two kinds of innovation.

In general, the break-through innovations are more likely to fail in the market because the new product goes far beyond the firm's current market experience. Such a viewpoint is supported by a study by Selnes et al. (1991), in which it was found that market unfamiliarity (also relative to technology unfamiliarity) was the greatest threat to new product success. To compensate for the company's lack of relevant market knowledge, the organization needs to gather extensive amount of market knowledge through data generation and market experimentation (Atuahene-Gima 1995). Accordingly, market orientation should be more critical and effective when the complexity and novelty of the product innovation increases. However, the literature contains some reservations towards market orientation information

system as a driver of product adaption. Some of these issues will be addressed in the sections below and related to the way the learning capability is approached in this study.

*First*, traditional market research can be viewed as a constraint on product innovation. The main critique is that market research cannot go beyond the experience of the customers interviewed (von Hippel 1988:103; Lynn, Morone and Paulson 1996). The traditional research methods, including focus group methods, very rarely discover new attributes. Traditional market research can be viewed as static and directed toward minor incremental changes (see Grønhaug 1995). However, as von Hippel emphasizes, some market research methods can be useful for this purpose (for example by combining different attribute elicitation and preference modeling techniques). von Hippel's (1988:119) argument is further extended to indicate that a firm's marketing research group has a 'manufacturer-as-innovator bias, which means that they search for user needs (i.e., benefit attributes) rather than possible sources of new product solution data provided by the users and customers. However, this may also be used as an argument for a market orientation information system capability providing a value to product development since multiple modes of information gathering are part of such a capability. Moreover, a firm does not know what it has to gather before it has exploited different kinds of information and then becomes more conscious about what works and what does not.

*Second*, the use of the salesforce as the interface between the company and the market is argued to be a constraint of market oriented firms. von Hippel (1988:199) pleads that it is not sufficient to use salespeople as the media for idea generation:

Industrial product salespeople, especially, spend much of their time at customer sites and, so, should be in a good position to obtain information on promising user new product needs, ideas, and prototype solutions. But sales departments are typically not staffed with people trained to do existing products. As a result, salespeople may have no incentives to learn about user developments that might have potential as commercial products. Instead, they have a positive incentive to deflect any discussion with the customer away from user-developed products and toward the question, 'what can I sell you of my present products?'

As a way of overcoming this constraint, von Hippel (1988:119-122) emphasizes the interface among different parties such as customers, marketing, production, research & development, and sales (see also Gupta, Raj and Wilemon 1986). However, these constraints are accounted for in market orientation information system. The core of market orientation information system is that a firm that combines its resources (e.g., knowledge of the individuals) so market

information may be gathered by several functions in the firm and disseminated across functions. Consequently, the criticism is more appropriate when directed toward lack of a market information system capability, which may be the case for firms that hold a marketing orientation (Bennett and Cooper 1979) or are marketing dominated (Workman 1993).

The empirical studies of the impact of market orientation information system on product adaption will be discussed in the following sections to compare the theoretical arguments with empirical findings. The impact of market orientation on new product success was analyzed in the studies by Greenley (1995a), Slater and Narver (1994) and Greenley (1995b). Greenley (1995a) defined the dependent variable as a relative new product success rate over the last three years. He proposed that market orientation would be positively associated with the company's new product success (Greenley 1995a; 1995b). The hypothesis was not supported in the study. A second study by Slater and Narver (1994:53) explored the impact of market orientation on new product success<sup>10</sup>, and support for a positive relationship was found.

A third study by Davis (1993:69) argued that market orientation affects incremental innovations favorably while it effects break-throughs negatively. The argument is that break-through innovations are more likely to occur outside the firm's industry and therefore customers are an inefficient source for break-through product innovations <sup>11</sup> (see also Lawton and Parasuraman 1980; Bennett and Cooper 1979; 1981). However, Davis (1993:130) found support for a positive effect of market orientation on break-through innovations (in the biotechnology industry), but not on incremental product innovations (Davis 1993:136). To explain such an effect the arguments by Atuahene-Gima (1995:279) may explain why market orientation information system can facilitate radical innovations:

..product newness reflects the experience the firm has in developing and commercializing the new product and of customers in acquiring and using it. It follows that radical

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<sup>10</sup>They define it as "new product success relative to all other competitors in the SBU's principal served market over the past year" (Slater and Narver 1994:51).

<sup>11</sup>Some of the arguments for the market orientation's negative impact on product innovation success can be due to the perception of the market orientation as equal to marketing orientation. For example, Workman (1993) uses 'marketing's limited role in new product development' as the starting point in his analysis and Bennett and Cooper (1979; 1981) use the term marketing orientation. One of the core aspects of market orientation is that it is the entire organization's orientation and not an organization dominated by the marketing department. Therefore, it is unclear to which extent the arguments by Davis (1993), Workman (1993), Bennett and Cooper (1979; 1981) and Lawton and Parasuraman (1980) are valid for examining the effects of market orientation on new product success. In a later study Cooper (1994) explicitly used market orientation as an important success factor for new product development.

innovations are more likely to require greater learning and behavioral change on the part of the firm and customers than incremental innovations.

The need for information about the market is greater for good performance with break-throughs, and thus, market orientation is proposed to positively affect break-through success. However, in a study by Atuahene-Gima (1995:284) it was found that market orientation only had a marginal positive effect on break-throughs. In contrast to the study by Davis, it was found that the impact of market orientation is greater on incremental product innovations.

In a fifth study, Cooper (1994:65) found that the more effort on 'marketing actions', the greater the success of product innovations. The most valuable 'marketing actions' were preliminary market assessment, detailed market study, customer tests and trials, trial sell/test market, and market launch. Additionally, cross-functional cooperation and coordination was a success factor in his study. His own interpretation is:

A thorough understanding of customers' needs and wants, the competitive situation and the nature of the market is an essential component of new product success. Sadly a market orientation and commitment to the customer are often missing. For example, new product projects were found to be decidedly unbalanced between technological versus marketing activities. (Cooper 1994:64)

The findings are somewhat mixed and yields no obvious conclusions. One reason for the mixed results may be the use of different operationalization of both market orientation and product adaption related variables. Another reason for the mixed findings are the mixed hypotheses and models used in the different studies. In sum, the empirical studies are difficult to compare and difficult to apply as support or invalidation of the arguments in this chapter.

#### **4.2.2.2 Hypothesizing the effect**

However, according to the theorizing in this chapter and Chapter 3, and the majority of the findings, market orientation information system is suggested to affect product adaption positively. A information system capability facilitates market information to be gathered by people from different functions of the organization. This should lead to less biased information.

Moreover, the dissemination of information enables multiple interpretations within the organization. Such a process causes more accurate knowledge about market needs and the competition. The learning becomes organizationwide and the organization is better able to use revised and accurate market knowledge for their market decisions. Two empirical studies might be used as support for the fact that market orientation information system is more effective than lack of such resource coordinative capability. The study by Greenley (1995b) provided empirical support for the view that firms that are equal on each of the market orientation dimensions perform better than organizations with an uneven market orientation across the dimensions. The study by Slater and Narver (1994) also found support for the view that a balanced orientation is more efficient than an uneven one <sup>12</sup>.

Organizationwide information processing about the customers enables the company to provide products that offer value to the users. Moreover, knowledge about competitors is useful to position the products. Since market learning is a cumulative process, market orientation is most effective when the a priori market knowledge is high. In such situations the absorbing capacity enables the company to see possibilities and threats that competitors with less market knowledge do not see. Since market orientation information system is both a function and a cause of market knowledge, market orientation is believed to enable the company to offer products with a comparative competitive advantage to the market. In contrast, it can be difficult to argue that the absence of revised and accurate market knowledge should increase the likelihood of launching successful products in the market, at least in the long run. Since markets are evolving, and due to the requirement of a certain absorbing capacity, the organization will benefit from updating its knowledge continuously. Moreover, since a market orientation information system capability may be rare and might even be difficult to imitate (since it is accumulative), market orientation can be a means to get a comparative advantage which may entail product adaption consequences. This leads to the assumption that the higher the market orientation information system, the higher the product adaption, and vice versa.

The shape of the effect is speculated to be progressive. For low values of market orientation information system the absorbing capacity will be too low to understand important traits of customers and competitors. Although the firm may learn about markets at low levels

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<sup>12</sup> The two studies by Slater and Narver (1994) and Greenley (1995b) use the Narver and Slater (1990) approach to market orientation (i.e., competitor orientation, customer orientation, and interfunctional coordination). However, the findings might be of relevance to the discussion.

of market orientation, a firm will probably not benefit from low market orientation since the value of the product adaption is relative to competitors. For higher values of market orientation, a firm may be able to understand the market to innovate and position its products successfully. Although it might be possible to argue for a progressive and positive effect on product adaption, this study will restrict the hypothesis development to the main tendency effect. Therefore, the effect of market orientation information system is restricted to an expected linear effect on product adaption. Accordingly, the considerations above lead to the following hypothesis:

Hypothesis 1: Market orientation information system has a positive effect on product adaption

### **4.2.3 The effect of market orientation domainwidth on product adaption**

In Chapter 3 it was argued that market orientation domainwidth may be viewed as a parallel to the exploitation-exploration continuum. Accordingly, the domain of market orientation represents the trade-off between a narrow market orientation versus a broad market orientation. The narrow market orientation is defined as the convergence of the firm's principally served market and its domain of market orientation. The narrow form of market orientation is a way to capitalize in segments where the firm has its current competencies with respect to market knowledge and production knowledge. Accordingly, the firm can behave more steadily in such market(s), and thus, the (short-term) risk is lower, and the firm can polish their products to fit the customer's preferences and the competitors' strategies.

A broad market orientation domain is defined as the positive difference between the firm's domain of market orientation and its principally served market. Since markets are dynamic the ability to offer superior products may benefit from the company's attention to, and experience in, domains outside current principally served market. A broad market orientation domain focus is consistent with the exploration strategy of organizational learning (March 1991), and is the search strategy for new ideas, new segments, and potential entrants (i.e., threats).

Exploration and a great market orientation domainwidth may be useful for the company's product adaption for the following reasons. *First*, a broad market orientation domain may lead to identification of new segments, where the company's resources are well suited to match. Accordingly, product adaption may be facilitated when the preferences of the segments and the resources of the company fit. *Second*, the company may utilize the experience from segments outside their own currently served segments. The company might learn about strategies from competitors in other domains that may be useful in their own market. *Third*, customers (e.g., lead users) in other segments may provide the company with ideas and resources that can be transferred to their own customers. *Fourth*, gathering data from new kinds of customers and competitors may require use of new market orientation approaches. Accordingly, a broad market orientation domainwidth is also a way to experiment with the way market orientation activities and resources are being used. Such experience may be traced back to the current segments (e.g., adopting the concept of lead-users from the industrial market on the consumer market), and serve as a source for better product adaption.

The company needs to develop skills to be able to analyze segments outside the currently served market (cf., Levinthal and March 1994). Consequently, a broad domain focus is a proactive strategy that may be useful to developing superior products. It is believed that not all companies have a broad domain focus (in addition to a narrow one) because some companies may perceive the narrow strategy to be less risky and more efficient. However, since markets are dynamic, companies will benefit from some amount of market orientation exploration. A narrow market orientation domain focus is expected to only facilitate a temporary comparative advantage regarding product adaption. In contrast, companies with a broader market orientation domain are more likely to maintain and develop products with a comparative advantage in the market.



The marketing and the organizational learning literature report that the main challenge is to facilitate learning through exploration, and that companies are far more exploitation oriented than exploration oriented (see Levinthal and March 1994; Starbuck 1983; Sinkula 1994; Day 1994; Slater and Narver 1995). The discussion above shows that such impact is believed to be positive, and thus, the following hypothesis is stated:

Hypothesis 2: Market orientation domainwidth has a positive impact on product adaption.

#### **4.2.4 Market orientation means alteration and its consequence for product adaption**

In Chapter 3 the organization's market orientation means alteration was argued to be important to prevent the market orientation activities from becoming static. Using the terminology by Lyles and Schwenk (1992), peripheral market orientation knowledge is about how to achieve the objectives of being market oriented. A particular firm's market orientation consists of knowledge associated with how to gather data about customers and competitors, how to disseminate data, and how to utilize data for decisions. The organization will also have a set of beliefs associated with the resources needed to conduct certain market orientation activities. Such market orientation knowledge, at the extreme, may be clustered into two groups. First, there can be internal consensus regarding the way market orientation is done within the company. Second, there may be a continuous discussion and disagreement regarding how market orientation is practiced within the company. The two groups of peripheral knowledge may be viewed as an exploitation strategy and as an exploration strategy, respectively (cf. March 1991). In this study, market orientation means alteration is to which degree the organization members discuss, and disagree, how market orientation is, and should be, done in the company.

Market orientation means consensus implies that mutual learning within an organization (group think) leads to convergence between organizational and individual beliefs regarding market orientation. Convergence maximizes market orientation capability exploitation. All members, at the extreme, have the same perception (beliefs) about how to conduct market

orientation, and thus, low internal transaction (coordination) costs exist. The results of a low exploration might be a more narrow set of market orientation resources along with the perseverance effect (Lyles and Schwenk 1992; Selnes and Wesenberg 1993). The latter effect implies that the organization will ignore signals that contradict the value of current practices, and thus, the way of being market oriented may be viewed as static.

If market orientation becomes a set of routine procedures (i.e., consensus about peripheral knowledge) the capability to adapt the organization to new situations (markets, critical incidents, etc.) becomes poor. New market situations may require new approaches to data generation (e.g., the ship construction market might differ from the ship maintenance market with respect to how information about needs and preferences should be gathered). Moreover, new technology might motivate the organization to rethink and alter its market orientation. For example, the evolving role of information technology should be expected to affect the way organizations learn. In a similar way, due to turnover, to utilize the people's skills in the organization, efficient market orientation might benefit from adjustments of organization of work. Also other circumstances can be proposed to affect the impact of market orientation on product adaption. However, disagreement about means-end beliefs of market orientation is costly because more time is used on coordination. A broader, and changing, set of peripheral market orientation knowledge increases maladaptation costs within the organization and the risk of failures externally. The case of causal ambiguity (Barney 1991; Teece, Pisano and Shuen 1997) is central here. The organization does not always know the consequences of their actions as well as success factors behind certain kinds of performance. Therefore, changing the means might lead to failures as well as success. However, besides the risk of experimentation failures, the organization learns more about their market orientation when they do experiments. They make tacit knowledge explicit and they get more knowledge about means-end relationships when there are disagreements and experimentation (see Nonaka 1994; Lyles and Schwenk 1992). The organization continuously considers its market orientation resources and activities, and this may facilitate the discovery of new possibilities of offering new products to the market (cf., Moorman and Miner 1997). Although it is believed that the effect of market orientation means alteration on product adaption will be diminishing

at some point, the main tendency is expected to be positive. Accordingly, the study will restrict the model to the main tendency effect. The following hypothesis is stated:

Hypothesis 3: Market orientation means alteration has a positive effect on product adaption.

#### **4.2.5 The impact of market orientation tacitness on product adaption**

In Chapter 3.2, a market orientation learning capability that consists of tacit knowledge was argued to be a contribution to the firm's sustained competitive advantage since it can be difficult or costly to imitate by competitors. This section attempts to explore why, and how market orientation can benefit from being tacit with respect to product adaption.

The market orientation capability may be argued to have tacit attributes (Hunt and Morgan 1995) and thus serve as a source of the firm's sustained competitive advantage since it can be costly to imitate by competitors. There are two reasons why a market orientation which has a great amount of tacitness may be beneficial to the company's product adaption.

*First*, market orientation capability is believed to work most efficiently when it is performed as a tacit routine (Nelson and Winter 1982). So doing, most members of the organization know how market orientation resources can be used to perform market orientation activities. In other words, market orientation is embedded in the organization's scripts and way of thinking. They may be conscious about the market but do not make use of tacit scripts regarding the effort toward performing market orientation activities. The organization benefits from a tacit market orientation capability in which it releases cognitive effort because the activities are done automatically and without high internal 'transaction costs'. A (high degree of) tacit market orientation capability releases 'resources' that can be a strategy for reinvesting in the market orientation capability (see Penrose 1959), and thus, improve the performance of market orientation resources and market orientation activities. This released effort means that the organization may exploit better the resources dedicated to market orientation. Accordingly, a tacit market orientation may imply that the organization produces

and utilizes more market knowledge than an organization that has a market orientation which is less tacit. The result might be better product adaption due to more efficient market learning.

*Second*, the resource-based theory holds that a superior resource has a considerable tacit element, particularly because such resources are costly to imitate. Tacit knowledge at the organizational level is embedded in routines and often taken for granted of the people working in the organization (Nelson and Winter 1982). Routines are patterns of social interactions that take place inside the organization. Such social interactions cannot possibly be fully codified, and thus, are partly tacit by nature. A market orientation capability which is difficult and costly for competitors to imitate is expected to be an important contributor for sustained product adaption. Particularly, it is believed to be so because the driver of successful product adaption is tacit, and it is difficult for competitors to imitate the advantage since the source of the comparative advantage is hidden information for the competitors.

If market orientation is a driver of market performance, which is argued to be the case in the discussion above, the tacit-dominated market orientation should enable the company to hold the competitive advantage over a longer period of time. Accordingly, it is believed that a market orientation which is tacit has a performance advantage over the market orientation with less tacitness. The following hypothesis is stated:

**Hypothesis 4: Market orientation tacitness has a positive effect on product adaption.**

The next chapters continue with a discussion of moderating effects and the direct and indirect effects of product adaption on other kinds of market effectiveness and efficiency.

## 4.3 THE MODERATING ROLE OF BUSINESS STRATEGY

Generally, the literature assumes a relationship between organizational strategy and different kinds of orientations (Hambrick 1982). As argued by Narver and Slater (1990:28), the effects of market orientation can depend on which type of competitive strategy the firm relies on. Since market orientation learning capabilities imply certain activities the adoption of such orientation requires some accompanying resources and cognitions. In this chapter the focus is on how the relationship between market orientation learning capabilities and product adaption may be moderated by competitive strategy.

Competitive strategy at the business level can be defined as how a company (i.e., a business unit or a division of a company) competes in a given industry with respect to the choice of positioning strategy (Hofer and Schendel 1978; Porter 1980; Venkatraman 1989). Porter (1980) distinguishes among four kinds of strategies out of two dimensions: strategic advantage and strategic scope. The strategic advantage deals with whether the strategy is low cost position (i.e., overall cost leadership) or product uniqueness as perceived by the customer (i.e., differentiation strategy). As Porter (1980:35) argues, effective implementing any of the generic strategies requires "total commitment and supporting organizational arrangements". Since the two generic strategies are different the accompanying resources and capabilities should differ for the firm that holds a differentiation strategy versus a firm that holds an overall cost leadership strategy.<sup>13</sup>

According to Porter (1980:35) an *overall cost leadership* strategy requires "aggressive construction of efficient-scale facilities, vigorous pursuit of cost reductions from experience, tight cost and overhead control, avoidance of marginal customer accounts, and cost minimization in areas like R&D, service, sales force, advertising, and so on. A great deal of managerial attention to cost control is necessary to achieve these aims". The main challenge of such strategy is to decrease costs, and to achieve the lowest costs within the industry. The objective with respect to product adaption can be to innovate toward a product that fulfills the customers' needs at the best price. Such product development requires revised and accurate

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<sup>13</sup> Two approaches to competitive strategies are commonly used in marketing, namely Miles and Snow's approach and Porter's approach. In contrast to Porter's approach, Miles and Snow's (1978) focus is on the relationship between competitive strategy and organizational features, and should thus be redundant to many facets of market orientation. Additionally, the two studies of market orientation that include competitive strategies use Porter's (1980) schema of generic competitive strategies. Accordingly, using the latter approach facilitates comparison with previous findings.

knowledge about the customers' needs. However, since the main challenge for products provided by cost leaders is to reduce the price, the cost control is most critical. Therefore, much of the companies' resources are allocated to areas such as space management, logistics, production effectiveness, standardization of processes (e.g., franchising manual), launching private brands (i.e., generic brands like Hakon Cola and Albi). Accordingly, the customers' assessment of the firm's products will be on whether the firm is able to provide low price products that are useful to the customers, and thus, other firm capabilities become crucial. However, for cost leaders, the competitors can be a valuable source for ideas because a low cost position "defends the firm against powerful buyers because buyers can exert power only to drive down prices to the level of the next most efficient competitor" (Porter 1980:35). Therefore, continuous monitoring of competitors' costs, processes and products can be important to improve the performance of the firm's products.

In contrast to the overall cost leadership, the *differentiation strategy* is about "differentiating the product or service offering of the firm, creating something that is perceived industrywide as being unique" (Porter 1980:37). According to Porter (1980:37) it should be emphasized that "differentiation strategy does not allow the firm to ignore costs, but rather they are not the primary strategic target". Quite contrary to the cost focus, a differentiation strategy tries to position the firm beyond price, namely to provide an offering to the market that meets the needs of the customers better than what is offered by the competitors. Consequently, differentiation strategy and market orientation learning capabilities are suggested to be positively related, while an overall cost leadership and market orientation seem to be less (positively) related. First, it can be argued that differentiation requires strong marketing abilities (e.g., customer satisfaction monitoring, strong cooperation with channel members). Second, there is a need for strong coordination among functions in R&D, product development, and marketing. Both of these requirements are found as elements of market orientation learning capabilities. Many of the ideas for differentiated products come from customers through general information, experiments and feedback (von Hippel 1986). To solve the customers' problems in a better way than current products, the differentiator can get an advantage through launching products with better features, attributes and performance. Since customers are different, differentiators often benefit from having a wide portfolio of products to meet the customers' needs better than their competitors, and thus, achieve a better market position. Additionally, since markets are evolving, a product will not be superior too long.

Therefore, a differentiator needs a learning system (i.e., capabilities) that can process complex information about the current and potential customers and segments as well as monitor and benchmark its competitors continuously. As argued in the previous sections, market orientation may be such a capability.

It is believed that market orientation can be important as a driver for product adaption for both cost leaders and differentiators. However, the greatest impact of market orientation on product adaption can be proposed to be for those firms holding a differentiation strategy emphasis. To provide products perceived by the customers as unique to the market a market orientation is important to match the company's offering to hitherto uncovered needs better than competitors. In contrast, for cost leaders, market orientation cannot be of the same importance since offering a good price product requires attention to internal processes as well as attention to uncovered customer needs.

In the two studies of market orientation which include competitive strategy, there is found a stronger positive covariation between market orientation and differentiation strategy than between market orientation and overall cost leadership (Pelham 1993:160; Narver and Slater 1990:26). Moreover, Narver and Slater (1990:30-32) found empirical support for the assumption that market orientation has less impact on profitability for commodity businesses (i.e., cost leader-like strategy) than for noncommodity businesses (i.e., differentiator-like strategy). Correspondingly, Pelham (1993:160) found an indication to the effect of market orientation on marketing effectiveness (i.e., an index including new product success, relative product quality, and customer retention) is stronger for differentiators than for cost leaders.

Together, the discussion in the sections above leads to the proposition that differentiation strategy moderates more positively the effect of market orientation on product adaption than cost-leader strategy. Since firms hold both kinds of strategies simultaneously (Miller 1992), the focus in this study is the relative strategy emphasis, that is, differentiation strategy emphasis in relationship to overall cost leadership emphasis. The following four related hypotheses are provided:

Hypothesis 5: (a) Market Orientation information system, (b) market orientation domainwidth, (c) market orientation means alteration, and (d) market orientation tacitness has a greater positive effect on product adaption in conjunction with a differentiation strategy emphasis than in conjunction with an overall cost leadership strategy emphasis.

## **4.4 THE INDIRECT EFFECTS OF MARKET ORIENTATION**

Product adaption should contribute to market rewards to be an attractive outcome of market orientation, and thus, indicate whether market orientation is a set of valuable learning capabilities to the firm. Since superior products are associated with costs, it is less likely that product adaption will affect profitability directly (Kleinschmidt and Cooper 1991:245). Instead, it can be argued that two kinds of effects are particularly closely associated with product adaption, namely, relative price (i.e., price premium) and sales growth. Profitability serves as the ultimate effect of market orientation. Chapter 4.4.1 discusses the effect of product adaption on relative price, while the effect of product adaption on sales growth is discussed in Chapter 4.4.2. Furthermore, Chapter 4.4.3 covers the effect of sales growth on profitability, and in Chapter 4.4.4 the effects of relative price on sales growth and profitability are covered. The model of direct and indirect effects of the four market orientation learning capabilities is presented in Chapter 4.5.

### **4.4.1 The effect of product adaption on relative price**

In a market of competition the customers will pay the highest price to the company providing the most useful product(s), the second highest price to the company providing the next-to-most useful product(s), and so on. Formally stated, the price a firm may charge is 'the price of the customer's best alternative (called the reference value) plus the value of whatever differentiates the offering from the alternative (called the differentiation value)' (Nagle and Holden 1995). A rational customer is then willing to pay a maximum price equal to the total economic value (reference value plus differentiation value) of the product. For example, a car that uses less gasoline than other cars, all other attributes held constant, can be sold for a higher price because it provides a differentiated value to the customer. Needless to say, the condition is that the customer appreciates this particular attribute of the product.

According to Murphy and Enis (1986:25), a product 'is perceived by the buyer to be a combination or bundle of utilities - qualities, processes and/or capabilities (goods, services, and ideas) that is expected to provide satisfaction'. The more satisfied the customer thinks he or



she will be with a product the more he or she is willing to pay for it. It is widely assumed that expected and/or experienced satisfaction with a product, which is the result of product adaption, has a positive effect on the price a firm can charge for a product compared to what is charged by the competitors (Fornell 1992; Oliver 1997).

The customer operates in a market faced with different price/quality ratios. Most customers will probably agree that a first class cabin on a plane is more desirable than traveling in the tourist class cabin. However, the customers have different needs and do not want to pay for attributes they cannot exploit (Porter 1980). Consequently, they are likely to choose a less expensive product that provides a simple set of attributes. The less sophisticated product will then be chosen because it makes a good bargain for the customers due to lower price. A less superior product is then attractive to some customers, or to some customers in some situations, because it is sold at a lower price (compared to the price charged for the alternatives in the market).

It is assumed that the better the products with respect to product adaption to the market (differentiated value), the higher the price the firm can charge in the market, and vice versa. This leads to the following hypothesis:

Hypothesis 6: Product adaption has a positive effect on relative price

#### **4.4.2 The effect of product adaption on sales growth**

Sales growth can be defined as the increase in the total amount of sales (units and/or revenue) over a specific period. To make the construct of sales growth appropriate for both cost leaders and differentiators, sales growth is defined as the change in revenue last year as compared with competitors (to adjust for general market demand change). Most commonly viewed within the marketing literature, sales can grow due to lower price or due to higher quality. In both cases the customers face an attractive benefit/price ratio, and therefore, are willing to buy products from the company. Product adaption can affect the firm's sales since customers usually buy products that provide superior value to users and represent an advantage over competing products. Hence, customers that experience products which meet

their needs "are likely to buy more frequently and in greater volume and purchase other goods and services offered by the firm" (Anderson, Fornell and Lehmann 1994:55). This is consistent with Kotler's (1994:20) argument that a satisfied customer is buying more, and staying loyal longer, and buying new products as the company introduces them. Accordingly, sales growth is assumed to be an outcome of an offering which is adapted to the market (Narver, Jacobson and Slater 1993; Selnes et al. 1991:3). The relationship between product adaption and sales growth is proposed as follows:

Hypothesis 7: Product adaption has a positive effect on sales growth

Both relative price and sales growth are expected to entail other kinds of performance to the firm. Thus, a firm is not necessarily concerned about relative price and sales growth *per se*, but rather because they might serve as a means leading to other kinds of performance. The next two chapters explore the further effects.

#### **4.4.3 The effect of sales growth on profitability**

It is believed that sales growth is a means to profitability (Narver, Jacobson, and Slater 1993; Cronin and Page 1988). The arguments used to explain the nature of the relationship are similar to those used for the market share-profitability relationship (Cronin and Page 1988). All things being equal, sales growth should entail a higher market share. Accordingly, a study of the relative impact on profitability of sales growth and market share found that both have a significant and positive impact (Cronin and Page 1988). Therefore, the argumentation for sales growth and profitability will first utilize the rationale for the impact of market share on profitability. Gale and Buzzell (1990) present several reasons for the effect of market share on profitability.

*First*, market share is associated with economies of scale and the benefits from the experience curve. In general, economies of scale is assumed to be achieved in procurement, manufacturing, R&D, and marketing. Gale and Buzzell (1990:215) found that the relative cost is negatively correlated with market share. Therefore, a large business is believed to be more

efficient than a small business, *ceteris paribus*. *Second*, risk aversion by customers can be in favor of a larger-share business. Buying from a large-share business might be easier to justify for a customer within the buying organization<sup>14</sup>. Additionally, a large-share firm might also be expected to stay longer in business and continue to provide service (Bergen, Dutta and Walker 1992).

*Third*, market power can be an important consequence of a high market share: "their size permits them to bargain more effectively, to 'administer' prices, and in the end, realize significantly higher prices for a particular product" (Gale and Buzzell 1990:199). For example, Gale and Buzzell (1990:215) found that large-share businesses use their market power to extract price premiums.

*Fourth*, a common underlying factor might explain the relationship between market share and profitability. Several studies have tried to find a common underlying factor in order to claim the relationship as spurious. However, in general the relationship seems to be robust also when additional variables are included in the analysis<sup>15</sup> (Ailawadi, Farris and Parry 1993; Gale and Buzzell 1990; Cronin and Page 1988; Prescott, Kohli and Venkatraman 1986). There are exceptions concerning the positive effect of market share on profitability<sup>16</sup> (Gale and Buzzell 1990), and it is also believed that several factors can moderate the relationship<sup>17</sup> (Boulding and Staelin 1990; Szymanski, Bharadwaj and Varadarajan 1993). However, in a review of forty-eight studies of the market share-profitability relationship, Szymanski, Bharadwaj and Varadarajan (1993:14) found that 'on average, market share has a significant and positive effect on business profits'. For example, in an analysis of the PIMS data, Buzzell, Gale and Sultan (1975) found that ten percentage point increase in market share was followed with a five percentage point increase in ROI. Without interpreting the strength of the

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<sup>14</sup>In this context, it might be appropriate to use organization as equivalent with 'organized behavior systems' to note that both ad hoc groups, households and firms can provide the same need for social acceptance regarding purchases (see Priem 1992:137)

<sup>15</sup>The strength of the relationship between market share and profitability decreases when additional variables are added. However, the relationship is still positive and significant, even though not as strong as suggested in Buzzell, Gale and Sultan (1975).

<sup>16</sup>Particularly, studies of small-share businesses show that some of them are very profitable. The traits of those businesses are high product quality and low total costs. On the other hand, some market leaders have poor rates of return (Gale and Buzzell 1990:209).

<sup>17</sup>Eleven moderators are proposed in the literature (in addition to measurement and sample aspects). The moderators address different market structures, competitive strategy and firm-specific resource issues. The strongest finding is the positive moderating effect of intangible resources (such as strategic decision-making skills). Consequently, if a firm is to profit from an increase in market share it has to have an organization that can facilitate the growth.

relationship too literally, there is reason to believe that market share, and thus sales growth, has a positive effect on profitability.

Additionally, "market participants perceive sales growth to contain information about future term business performance that is incremental to that depicted by earnings" (Narver, Jacobson and Slater 1993:2). The stock market anticipates an increase in sales to cause higher future profitability. On the other hand, there might be a trade-off between profitability and sales growth. Expanding a firm's market is associated with costs, and therefore, can be negatively correlated with profitability (see Selnes 1990). Not every form of growth is successful. Particularly, diversified growth is often followed by inferior profitability (Day 1990:13). Finally, the costs associated with sales growth can be viewed as an investment that first contributes positively to profitability in a later period (Gale and Buzzell 1990:220).

Although there is reason to believe that sales growth is not always followed by profitability, the positive relationship between sales growth and profitability is assumed in the literature (Cronin and Page 1988; Narver, Jacobson and Slater 1993). Consequently, the relationship between sales growth and profitability is hypothesized as follows:

**Hypothesis 8: Sales growth has a positive effect on profitability**

#### **4.4.4 The effects of relative price on sales growth and profitability**

Relative price is an important cause of profitability because it generates revenues, and thus, contributes to profitability. The importance of the price-profitability relationship is illustrated in the following: 'The problem for British Airways is that it only makes a profit if we sell seats at the highest possible price ... its very easy to fill the plane and lose money' (John Watson, BA's director of Regions and Sales, Financial Times, January 1991). In Chapter 4.4.1 it was shown that the firm could expect higher prices as a function of product adaptation. Firms that can provide superior products in a market can charge higher prices and then generate

higher revenues and thus increase profitability. Accordingly, the next hypothesis is stated as follows:

**Hypothesis 9: Relative price has a positive effect on profitability**

Although relative price is suggested to positively affect profitability, the downside is believed to be sales growth. According to the economics of price sensitivity, the volume decreases when the price increases. With respect to this study, product adaption is viewed as a driver of sales growth. Relative price is then the effect on sales growth, controlling for product adaption. This means that for the same level of product adaption, relative price will most likely affect sales growth in a negative way. Most studies of price elasticities show that demand is elastic, that is, unit sales decrease when the price goes up, and vice versa (for a review, see Nagle and Holden 1995). For the same level of product adaption, a price above the average of the industry is expected to cause sales decline and a lower price may boost the sales.

Relative price seems to have a straight-forward effect on sales growth. However, the impact can be weakened by the fact that some customers can make use of relative price to infer the quality of the products, and thus, the price may increase the sales rather than the opposite. The price may be a quality cue where the customers believe qualities differ among brands within the product class, they perceive the low quality imposes the risk of a large loss, or they lack other information enabling them to evaluate quality before purchase (Monroe 1973; Zeithaml 1988). In such situations the sales may increase when the price increases and becomes higher than the average in the industry (Nagle and Holden 1995). However, it is reasonable to see such situations as exceptions rather than the rule. Therefore, the following relationship is proposed:

**Hypothesis 10: Relative Price has a negative effect on sales growth**

## 4.5 THE MODEL

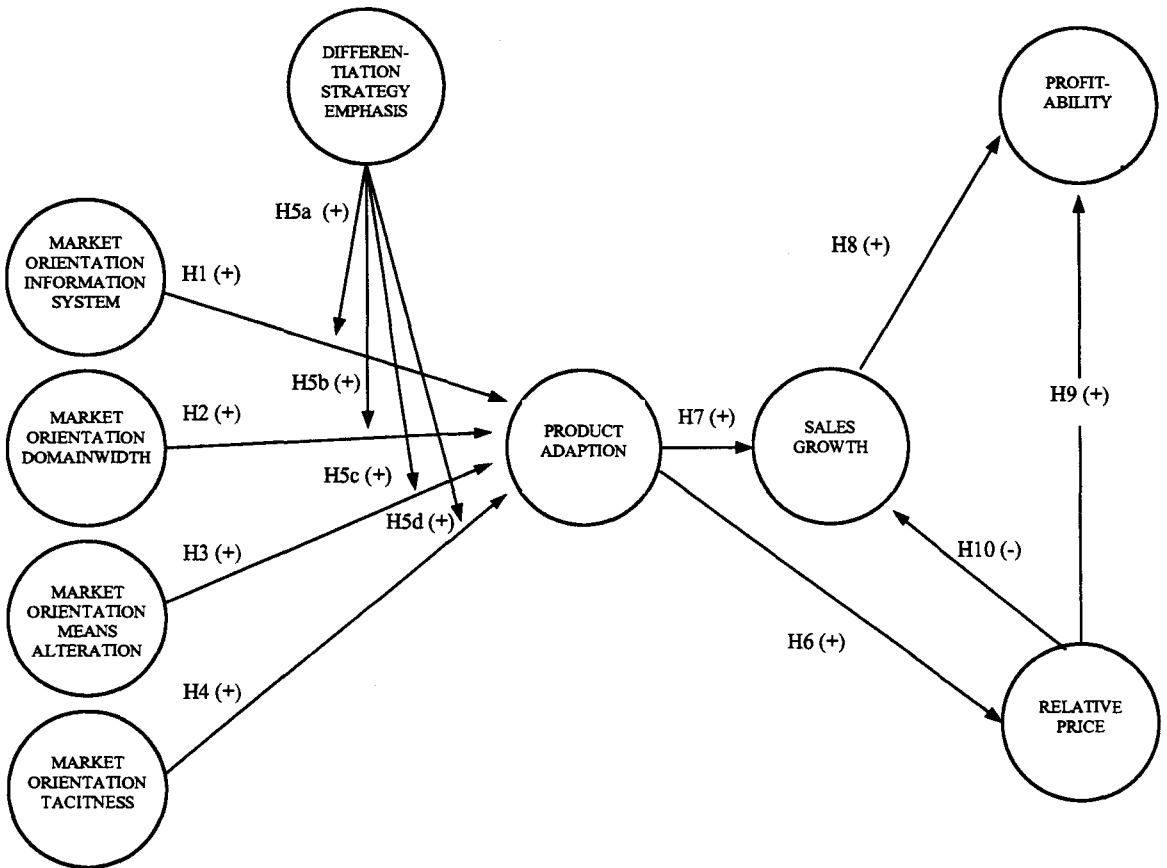
The ten hypotheses constitute the hypothesized model of the effects of market orientation. The model is presented in Figure 4.2. The model is a fine-grained version of the conceptual model outlined in Figure 4.1. Profitability represents firm efficiency, while sales growth and relative price represent market reward. Product adaptation is the direct effect of the four market orientation learning capabilities, and thus, mediates the effect of market orientation on market reward, and, in next turn, profitability. Additionally, the four kinds of market orientation as a learning capability and the moderating effect of business strategy are included as drivers in the model.

In the general discussion of the four market orientation learning capabilities' role regarding achieving and sustaining competitive advantage (Chapter 3) the likelihood of several non-linear effects was discussed. Such non-linear effects are less likely when the constructs are brought together in one model. The argumentation for each of the capabilities' impacts on competitive advantage in Chapter 3.3 was made without any consideration of the interrelatedness among the four capabilities. For example, some of the arguments for the progressive effect of market orientation information system may be attributed to market orientation tacitness. When the organization manages to coordinate the firm resources to balance information generation, dissemination and responsiveness this might indicate a certain degree of market orientation tacitness. It takes time to learn how to manage production and exploitation of market learning, and thus, this experience is most likely to be internalized as tacit routines. Accordingly, the extra effect of high values of market orientation information system might be offset by market orientation tacitness.

In a similar way, the diminishing effects that were suggested for market orientation domainwidth and market orientation means alteration were based on the belief that the organization may lack routines and stability to exploit their market orientation resources to achieve competitive advantage and products that are adapted to the market. However, for the organization to get high levels of market orientation information system and market orientation tacitness, it is believed that market orientation needs some stability in its production and exploitation of market learning. Accordingly, the suggested diminishing effects of market orientation domainwidth and market orientation means alteration might be offset when controlling for the effects of the two other constructs of market orientation capabilities.

The argumentation above supports the simplification (i.e., proposing linear effects) of the hypotheses one through four that was made in Chapter 4.2. Additionally, testing a theory of the effects of market orientation means that all of the effects are taken into consideration simultaneously. This implies that testable hypotheses may be different from stand-alone propositions found in the literature and in the capability-based theory of market orientation outlined in Chapter 3. Accordingly, the hypothesized model presented in Figure 4.2 is suggested to consist of internally consistent hypotheses.

**FIGURE 4.2**  
**The hypothesized model of the effects of market orientation**



## ***CHAPTER 5***

# **RESEARCH METHOD**

This Chapter contains considerations and choice of research method to test the theory and accompanying hypotheses. Chapter 5.1 addresses the consideration and choice regarding research design. Chapter 5.2 includes discussion and selection of the empirical setting. Chapter 5.3 deals with the sampling frame and sampling procedures of the study. Chapter 5.4 provides considerations with respect to control variables. The measures of the constructs included in the model are discussed and described in Chapter 5.5. Data collection is presented in Chapter 5.6.



## 5.1 RESEARCH DESIGN

The choice of research design is based on the trade-off between the design's ability to test the theory and the resources available. Since treatment manipulation is difficult where organizations are the unit of analysis, a design for unobtrusive research operations should be selected for studies of the effects of market orientation (McGrath 1982:73). Market orientation is difficult to manipulate in the short run, and it may take years before, for example, a resource becomes tacit and new information systems work within an organization. Such treatment manipulation is also difficult when the number of independent variables is high and there are more than two values that can be assigned to each variable, and thus, the number (and combinations) of different treatments will be too many. Two kinds of designs are relevant when treatment manipulation is not possible: correlation design and panel design. The best alternative is a panel design to simultaneously meet the requirements of isolation (through control variables), association (through variance in the independent constructs, i.e., market orientation and competitive strategy), and direction of influence (through two or more observation periods). Such a design is requested in the market orientation literature (Narver, Jacobson and Slater 1993).

However, the resources available do not allow the time scope and costs associated with a design involving two periods of data collection. Consequently, a correlation design is the most appropriate for testing the theory for this study. So doing, the requirement of proving the direction of influence is not handled by the design. However, the direction is not of crucial importance for two reasons. First, it can be argued that direction is the least important criterion of causality since the two other (isolation and covariation) must be satisfied first<sup>18</sup> (Bollen 1989). Second, the literature does not dispute the direction of influence for the hypotheses in the theory presented in this study. Although a correlation design is inappropriate to reveal the direction of influence it serves as a starting point for a cross-lagged panel correlations design (Cook and Campbell 1979). Accordingly, the correlation design can be extended to a panel design by subsequently doing a follow-up study, and thus, the choice of a correlation design does not prevent the study from later becoming more appropriate for testing causal structures (for an example, see Narver, Jacobson and Slater 1993).

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<sup>18</sup> Direction of influence is only of interest after a parameter estimate has been identified and such a parameter satisfies the requirement of isolation. Before such conditions are established the question of directionality is absurd.

A correlation (survey) design meets the requirements of association and isolation satisfactorily. The isolation of other intervening influences may be met by the use of control variables and a homogeneous population (e.g., one industry) (Mitchell 1985). To enable test of covariation, variance in the independent variables is necessary to secure. Using a correlation design, such variance is required to be natural. It is believed that different kinds of firm resources, such as market orientation capabilities, and business strategy is heterogeneously distributed within any industry (see e.g., Wernerfelt 1984; Slater and Narver 1994; Porter 1980, respectively). Accordingly, variance of the independent variables should be possible to achieve. An advantage of correlation design is that it enables the specification of the value mapping between the constructs (e.g.,  $\gamma_{11}$ ) and for determining variance explained (e.g.,  $\gamma^2_{11}$ ;  $1-\zeta^2_1$ ) (McGrath 1982:81-82). Moreover, the correlation design also makes it easier to account for random and systematic measurement errors (Jöreskog and Sörbom 1982), and thus, avoid errors that may lead to biased and attenuated covariation coefficients. The next chapter contains considerations regarding the empirical context for the design.

## 5.2 EMPIRICAL SETTING

The empirical study can be classified as a theory test (cf., Cook and Campbell 1979). For theory testing, internal validity and statistical conclusion validity are important to accomplish when selecting empirical setting(s). As a general theory of the effects of market orientation, the theory should hold for firms in general. According to Calder, Phillips and Tybout (1981; 1982; 1983) a theory that is proposed to apply for organizations in general can be rejected if it is falsified for any subgroup of organizations. In contrast, if the theory holds, subsequent studies may explore the external validity of the theory (cf., applied research).

A subgroup of organizations enables the choice of a setting which is homogeneous for factors outside the model to improve the statistical power of the test through less random error variance as well as to improve the internal validity through isolation of third variables that might affect the relationship among the variables in the model (see Cook and Campbell 1979; Mitchell 1985). To determine the criterion of homogeneity a higher level unit of analysis may be considered.

For companies, the industry serves as a higher level unit of analysis. Accordingly, when selecting one industry it may be possible to rule out industry effects. Such effects are claimed to be present in the literature (see, e.g., Porter 1990; 1980) but are difficult to determine a priori, and thus, to include as control variables. Furthermore, Slater and Narver (1994) and Kohli and Jaworski (1990) indicate that the effects of market orientation can be dependent on the competitive forces. For example, the degree of competition is assumed to affect how important it is to deliver products that match the needs of the customers (Fornell 1992). The stronger the competition, the more will dissatisfied customers switch to another supplier, and thus being market oriented, given market orientation's proposed effect on product adaptation, is more important to such companies. When the competition is limited, the dissatisfied customer will (have to) stay with the supplier (cf., monopoly effect). However, since a single industry is chosen it is believed that such factors will be close to equal for all companies within the industry. Additionally, the choice of one single industry decreases the amount of error variance, and thus improves the statistical power.

The industry relevant to the empirical study is the Norwegian hotel industry<sup>19</sup>. Each hotel is normally an independent business unit and has to compete with other hotels to attract customers. The customers are often a combination of business travelers, tourists, and conference organizers. The performance with respect to profitability in the hotel industry (in Norway) differs for the hotels (Skalpe 1994). So does product adaption (product quality) (Henjesand 1991). If the theory proposed in the study holds, some of these differences may be traced back to differences in the hotels' market orientation. No studies have reported market orientation data for the hotel industry but Nesheim and Grønhaug (1993) claim that many of the market decisions in the hotel industry are based on limited market information. Moreover, using the general assumption in the resource based theory about industry resource heterogeneity (cf., Chapter 3), there is reason to believe that the hotel industry represents variation in the four market orientation constructs<sup>20</sup>.

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<sup>19</sup> Previous studies have selected not-for-profit organizations (Wood and Bhuian 1993), business-to-business organizations (Pelham 1993; Narver and Slater 1990), and heterogeneous businesses (Selnes, Kohli and Jaworski 1996; Jaworski and Kohli 1993; Greenley 1995a; b) as the empirical settings for the studies of the effects of market orientation.

<sup>20</sup> Although some of the firms (hotels) belong to voluntary chains or franchising system, these systems do not to a great extent make use of systemwide routines for its market activities (see e.g., Henjesand 1991).

## 5.3 SAMPLING FRAMES AND SAMPLING PROCEDURES

The total hotel population in Norway was in 1995 1179 (The Norwegian Hotel and Restaurant Association 1996). The sampling frame is all hotels (sic code 63210) in Norway which are included in Dun & Bradstreet's corporations database<sup>21</sup> and the Hotels in Norway database for 1996-97<sup>22</sup>. In 1995 the number of corporate hotels was 594 and additional hotels reported in Hotels in Norway were 79. The hotels listed in the Dun & Bradstreet database are those which sent the annual accounts to the Register of Business Enterprises for 1995, while the additional hotels listed in Hotels in Norway are those which are branches of hotel holding companies (e.g., Rainbow Hotels), members of hotel chains but who did not send the annual account in due time for 1995 (e.g., they sent it too late, the hotel was established after 1994). The sampling frame has a bias towards larger hotels than is found in the entire population, since mostly corporate hotels are included. However, the sampling frame is assessed to be a satisfactory representation of the population.

Simple random sampling procedure is applied to select the cases for the study (see Frankfort-Nachmias and Nachmias 1992:177). This procedure ensures that every sampling unit has equal and known probability of being included in the sample (i.e.,  $n/N \Rightarrow n/(673)$ ). This was done through the random selection procedure of the CATI-system used by Markeds- og Mediainstituttet.

The sample size has to be decided. According to Bollen (1989:268) "no hard and fast rule" exists to determine the sample size associated with theory testing<sup>23</sup>. Simulations provide indications that the sample size should be above 100 cases to give reliable test statistics. The guideline is that the higher  $n$ , the more risky the test of the entire model. A risky test is associated with a small confidence interval associated with the test statistics (i.e.,  $\chi^2$ ) for the hypothesized model, and thus a greater likelihood of rejecting the theory ( $H_0$ )<sup>24</sup>. Moreover,

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<sup>21</sup> The database includes all hotels that have sent annual accounts to the Register of Business Enterprises (i.e., Foretaksregisteret).

<sup>22</sup> The database is available through Reiselivsutvikling AS and the Norwegian Hotel and Restaurant Association.

<sup>23</sup> In Prelis 2, there is reference about  $n=(k(k-1))/2$  for a polychoric correlation matrix, where  $k$  is the number of indicators. For the complex model of the study it means that the sample size should be about 1000. However, the number necessary to compute a simple variance-covariance matrix is less sample size dependent.

<sup>24</sup> The norm in the literature seems to be a (one-tailed) probability of .05 for rejecting a true  $H_0$  (e.g., Jaworski and Kohli 1993; Narver and Slater 1990), and thus, should be applied in this study as the criterion for when each of the covariations can be assessed to be corroborated. A lower probability for the different effects and a

the greater the number of free parameters in a model, the greater sample size (n) is needed (Bollen 1989:268). Bentler and Chou (1987) suggest a minimum of 5:1 ratio between sample size and the number of free parameters to be estimated. With a model of approximately 34 indicators<sup>25</sup> a sample size of approximately 400 may meet the Bentler and Chou requirement. This should entail a sample size that reduces the risk of random sampling error as well as possible estimation problems of the model. Moreover, the model includes a moderator variable. The sample size increases when using moderators. It has been suggested that the sample size requirement should be doubled compared to a model without moderators (Klein et al. 1997), and a minimum of 400 cases. The requirement of 800 cases is difficult to accomplish because of the limited number of companies in the hotel industry and the costs associated with such considerable number of cases. However, 400 cases should be sufficient for testing the theory of the direct effects and also meet the minimum number of cases addressed by Klein et al. (1997) and Johnsson (1997). Consequently, the sample size is set to 400 cases.

Sample size is not an important issue if the model fits the data perfectly. However, since models never fit data perfectly, specification errors must be weighted against the sample size. Power, which is defined as the probability of rejecting the null hypothesis when it is false, and a false null hypothesis means that the alternative hypothesis is 'true' (Kaplan 1995), is then a balance of sample size and specification errors. Moreover, a small sample size might lead to support a false model and a large sample size might lead to support rejection of a 'true' model. With respect to individual paths in the model, a small sample size might lead to low power to detect small and 'true' effects and a large sample might give a bias towards accepting false effects. This balance is known as the Type I and Type II errors dilemma. Accordingly, both a too small or too large sample size is undesirable. To detect the sample size which is necessary one has to take into account the experience from previous studies (Kaplan 1995; MacCallum, Browne, and Sugawara 1996). However, no information has been reported regarding effect size and statistical power for any of the relationships in the model. The rule-of-thumb regarding sample size decisions made in the previous section is thus the best guess to determine the efficient sample size for this study to secure sufficient power.

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higher probability for the entire model will decrease the ability to prove associations among the different constructs in the model.

<sup>25</sup> 34 indicators are the index of the 32 'market orientation information system' construct plus the minimum of three indicators for the other multi-item constructs in the model. Accordingly, the indicators used in the final analysis are expected to be considerably less than the items used in the questionnaire.

## 5.4 CONTROL VARIABLES

As argued in Chapter 5.1, including control variables is important to meet the requirement of isolation. The discussion of the need for control variables is limited to competitive strategy because this potential source of isolation violation is not ruled out by the population choice. According to the market orientation literature competitive strategy is expected to be correlated with several constructs in the model (cf., Narver and Slater 1990; Pelham 1993).

According to the business strategy literature (e.g., Porter 1980) the two pure forms of business strategies may lead to equal ultimate performance. Moreover, differentiation strategy is proposed to be more associated with market orientation (cf., Chapter 4), and the impact of differentiation strategy on profitability might be mediated by product adaptation. In other words, differentiation strategy may be positively correlated with the market orientation constructs *and* product adaptation, and thus, may be a potential source of masked or spurious effects of the four market orientation constructs on product adaptation (see Pelham 1993; Narver and Slater 1990). In contrast, overall cost leadership may affect profitability directly through lower costs. Overall cost leadership may be less positively, or even negatively, correlated with market orientation *and* product adaptation (see Pelham 1993; Narver and Slater 1990), and thus, might serve as a control variable in the model. Moreover, it is expected that if product adaptation is a characteristic of a differentiated firm, low prices may characterize overall cost leaders. To overcome potential spurious or masked effects of competitive strategy, the two strategy variables are included as control variables in the model for the test of hypotheses one through four and of six through ten.

Both strategy variables are modeled as exogeneous constructs, and thus, free to covary with the four market orientation constructs. Differentiation strategy and overall cost leadership are both expected to affect product adaptation. Overall cost leadership has proposed effects on product adaptation, relative price and profitability. For test of hypothesis five, the control for potential spurious and masked effects is handled by allowing the means of the latent constructs in the model to be different in the two groups (differentiated hotels vs cost leadership hotels) (cf. Bagozzi and Yi 1989). Accordingly, parameters of the structural model will be estimated controlling for differences in structural means.

## 5.5 MEASURES

Measurement refers to how a concept is linked to one or more latent constructs, and how these are linked to observed variables. Following Bollen (1989:180) the process of measurement is to (1) give the meaning of each of the concepts, (2) identify the dimensions and latent variables to represent it, (3) form measures, and (4) specify the relation between the measures and the latent variables (i.e., constructs). The first two steps are accomplished in Chapter 2 (market orientation) and Chapter 4 (the other constructs). To develop measures the study will rely on Churchill's (1979) recommendation to adopt and adapt measures used and validated in other studies. So doing, this study will be an attempt to cumulatively bring the theory of the effects of market orientation further since the constructs are comparable across different studies. Accordingly, the challenge is to find such measures in the literature, to adapt them to the empirical context, and to enable subsequent construct validity assessment. The measures are reported below and the complete list is presented in Appendix 2.

*Market orientation information system* is defined as the organizationwide generation of market intelligence associated with the principally served product-market, pertaining to current and future customers' current and future adoption criteria, and current and future competitors' current and future market behavior, together with the dissemination of the intelligence across departments, and organizationwide responsiveness to it (cf., Chapter 2). The construct is measured using the scale developed by Jaworski and Kohli (1993). The scale has 32 measures covering the three dimensions of the construct. 10 items represent information generation, 8 items represent information dissemination, and 14 items capture responsiveness. The scale is found appropriate and face valid in a comprehensive measurement development process by Jaworski and Kohli (1993), and thus, is a good representation of the construct. Each item is scored on a 5-point scale, ranging from 'strongly disagree' to 'strongly agree'.

*Market orientation means alteration* is based on Lyles and Schwenk's (1992) conceptual definition of the organization members' disagreement about the peripheral set (i.e., the means end relationships associated with market orientation). Five claims are developed based on the conceptual definition. The five items are (1) the amount of discussion about how the customer's needs can be investigated, (2) the degree of different opinions about how knowledge about customers and competitors can be achieved, (3) the amount of routines for



how information regarding customers and competitors should be gathered and used, (4) the change in information generation methods during the last two years, and (5) the amount of routines on how information about customers and competitors should be used for planning and decision making. Each item (claim) is scored on a 5-point scale, ranging from 'strongly disagree' to 'strongly agree'.

*Market orientation domainwidth* is defined as the positive divergence of the company's principally served market and the domain of market orientation. Five items represent the construct. They are the extent to which the company gathers information about customer segments outside currently served segments (3 items), to which extent the company, compared to competitors, has more knowledge about new trends, and to which extent the company, compared to competitors, pays more attention to competitors in other markets and industries. Each item (claim) is scored on a 5-point scale, ranging from 'strongly disagree' to 'strongly agree'.

*Market orientation tacitness* is measured by using items from Zander and Kogut's (1995) 20-item scale of tacit knowledge. One item covers perceived codifiability, three items represent perceived importance of system dependence, one item represents perceived process observability. Each item (claim) is scored on a 5-point scale, ranging from 'strongly disagree' to 'strongly agree'.

*Product adaption* will be represented by the product superiority measures by Cooper (1994). The seven measures cover uniqueness of attributes, value for money, meeting customers needs, relative product quality, price/performance, product benefits, and benefit visibility. The measures are consistent with recent work on product innovation performance (Moorman 1995) and product quality (Troye et al. 1996). Each item (claim) is scored on a 5-point scale, ranging from 'strongly disagree' to 'strongly agree'.

*Business strategy* will be measured using seven items from Nayyar (1993). Four items represent differentiation strategy and three items represent overall cost leadership. Differentiation strategy is measured through the (1) product flexibility, (2) reputation, (3) premium product quality, and (4) extensive customer service. Overall cost leadership is represented by (1) variable costs below competitors and (2) cost control emphasis. Each claim is scored on a 5-point scale, ranging from 'strongly disagree' to 'strongly agree'.

*Relative price* is measured by a single measure of to which extent the hotel is pricing below the competitors and is scored on a 5-point scale, ranging from 'strongly disagree' to 'strongly agree'. The item is reversed.

Consistent with Narver and Slater (1990) and Narver, Jacobson and Slater (1994), *profitability* will be measured by using return on assets. This single measure is most frequently used in analysis of profitability (Hofer 1983). Finally, *sales growth* is measured as the difference between sales  $t_1$  and  $t_0$  (see Narver, Jacobson and Slater 1993). Both profitability and sales growth will be measured by using subjective data (cf., Narver, Jacobson and Slater 1993) and accounting data. According to Dess and Robinson (1984) subjective data are highly correlated with 'objective' result accounting data. Particularly, it is so because accounts data may contain tax motivation bias. Profitability is compared with the most important competitors, ranging from poorer profitability, slightly poorer profitability, approximately the same profitability, slightly greater profitability, to greater profitability. Sales growth is compared with the most important competitors, ranging from lower sales growth, slightly lower sales growth, equal sales growth, slightly greater sales growth, to greater sales growth.

The measures reported above are polished through discussions with people with know how regarding the different variables. Additionally, people who are representatives of the informants in the study and people that know the hotel industry are used to adapt the items to the empirical setting. Accordingly, this comprehensive and iterative process has contributed to the accomplishment of a satisfactory face and content validity of the measures. The items are presented in Appendix 2. The final measures are in Norwegian and are included in the questionnaire presented in Appendix 5.

The way (multiple) items are related to the latent variables (i.e., constructs) differs for the constructs. There are two kinds of models for how measures can be related to the latent variables (Bollen and Lennox 1991). The first model treats the indicators as effects of the latent variable. Formally stated,  $y_1 = \lambda_{11}\eta_1 + \varepsilon_1$ , where  $y_1$  is one of the indicators of the latent variable,  $\eta_1$ , where the relationship between the indicator and the latent variable is represented by a coefficient,  $\lambda_{11}$ . The error term of  $y_1$  is represented by  $\varepsilon_1$ . When multiple indicators are applied, the latent variable is expected to explain and account for the covariations among the indicators. Consequently, the reason why the indicators are correlated is due to a common,

underlying, cause (i.e., the latent variable)<sup>26</sup>. This approach is labelled classical test theory and is accompanied by good procedures of validity and reliability assessments (Churchill 1979; Bollen and Lennox 1991). Apart from market orientation information system all measures in the study are considered as effect indicators.

The other model treats the indicators as causes of the latent variable. Formally stated,  $\eta_1 = \gamma_{11}X_1 + \gamma_{12}X_2 + \dots + \gamma_{1q}X_q + \zeta_1$ , where the latent variable ( $\eta_1$ ) is determined by its indicators ( $X_i$ ) (Bollen and Lennox 1991:306). Consequently, the indicators are free of measurement errors (since they only represent themselves). In contrast, the error term is associated with the latent variable, indicating that the indicators do not fully explain it. In this study the measures of market orientation are perceived as cause indicators. Several reasons underlie such a consideration. First, it can be argued that each of the 32 items of Jaworski and Kohli's scale can be necessary to become market oriented with respect to a market orientation information system, because they all capture unique aspects of the latent concept. Second, an effect indicator should have a common core (i.e., correlation) with the other indicators. Thus, each of the indicators can be substituted by other indicators through an infinite pool of items (Churchill 1979). However, when no particular pattern exists among the indicators this will not be possible. With respect to the market orientation information system, it can be hard to argue a priori that there will be any correlations among the indicators of the construct. For example, there are not necessarily correlations among a company's "we meet with customers at least once a year to find out what products or services they will need in the future", "individuals from our manufacturing department interact directly with customers to learn how to serve them better", and "we often talk with or survey those who can influence our end users' purchases". The items represent highly different approaches to market information generation. It can be very likely that the companies carry out some of these activities while others are not necessarily performed. In such a situation it will be most efficient to treat the indicators as causes of the latent variable (Bollen and Lennox 1991). However, the three dimensions of market orientation information system are seen as reflective measures (parcels) of the latent construct since a firm which holds a market orientation information system capability is expected to reflect this through a relatively even level of the three dimensions which means that correlations among the the dimensions are expected (cf., Chapter 3.3).

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<sup>26</sup> Consequently, the correlation between a set of indicators,  $y_1$  and  $y_2$ , is determined by the product of the two accompanying factor loadings, i.e.,  $\rho_{y_2,y_1} = \lambda_{11}\lambda_{21}$ .

## 5.6 DATA COLLECTION

The purpose of data collection is to gather valid data regarding the measures included in the hypothesized model. Information about the constructs will be gathered through primary data. Such data are available through interviews with managers of the companies since they are the most knowledgeable key-informants for organizationwide issues (Kohli, Jaworski and Kumar 1993). To reduce the risk of biased information about market orientation multiple informants should be used (Phillips 1981). The study by Kohli, Jaworski and Kumar (1993) provides indices that the perception of market orientation may depend on the kind of key informant that is used. In their study, marketers and nonmarketers systematically and slightly judged the organization's market orientation activities differently. Using key-informants, then, may cause biased estimates of the effects of market orientation. To reduce the risk of biased estimates, multiple informants should be used for the hotels in the study. Although the use of multiple informants seems to be most efficient, the use of multiple informants raises some problems. The sample size might have to be reduced due to the costs of conducting such a study. The costs of two informants may be twice the costs of one informant. Another problem is the risk of missing data for one of the multiple informants for some of the hotels, which leads to a need for a larger sample. Moreover, even though the study by Kohli, Jaworski, and Kumar (1993) found an informant factor, the impact of choosing multiple versus key informants seems modest in their study. The factor loadings and indicator means do not vary substantially across the two groups of informants. Accordingly, choosing a key-informant approach may be considered justifiable due to the benefits of sample size and the costs of carrying out the data collection.

The choice of the key informant should be done based on the person that has most knowledge about the issues addressed in the study. The most natural informant is considered to be the hotel manager, since hotels are mostly small businesses and the managers (CEO) of the hotels have relatively good information about the hotel's activities. All the previous studies of market orientation have made use of the business managers as informants.

To handle the large number of informants a telephone survey is selected. Telephone interviewing is superior to get access to a geographically dispersed population and to reduce the number of non-respondents (Frankfort-Nachmias and Nachmias 1992:234). Since the gap between the sampling frame size and sample size needed is small, it is important to apply a

survey method which is able to result in a high response rate. Compared to other survey methods, telephone interviewing may entail less informant elaboration on the different questions and the informants may also provide biased information regarding sensitive issues (Frankfort-Nachmias and Nachmias 1992:233). However, since the questionnaire developed in this study contains concrete and non-sensitive questions this problem is not expected to be of serious concern. Furthermore, to control the interview situation, CATI (computer assisted telephone interviewing) will be applied. To secure that the informant uses the response scale s/he will be asked to write down the meaning of the five response values.

The final sample contained 372 hotels. The number of cases is close to the goal of 400 hotels stated in Chapter 5.4. Accordingly, the final sample is ex ante sufficient to estimate and assess the hypothesized model. An analysis of non-respondents shows that these were hotels where the hotel manager was not available or did not want to participate. The latter was only the case for 44 hotels. The hotels which refused to participate did so because they did not give priority to such studies, did not feel that they were able to participate because the managers had worked too short a time as leader of the firm, or the managers perceived the questions to be of little relevance to them. The latter was the case for small hotels with one or two employees. Accordingly, small hotels are covered inappropriately in the study. This is also the case when comparing the average sales for the sample and the sampling frame. The average sales for 1996 was reported by the informants to be 17.58 million. The average sales for the sampling frame for 1995 according to annual accounts was 14.01 million. Thus, even with an expected increase in the sales of 5-10% from 1995 to 1996, the final sample is biased toward larger firms.

## **CHAPTER 6**

# **ANALYSIS**

The chapter contains the different analyses conducted in the study. Chapter 6.1 provides a report of the descriptive statistics (Appendix 3) and an accompanying discussion. Chapter 6.2 is concerned with information quality from a key-informant perspective. An analysis is performed to assess to which degree the choice of key informant has resulted in biased information. The next section (Chapter 6.3) contains an assessment of the measurement model and the respecifications done to meet the requirements of a satisfactory measurement model. The section also deals with an analysis of discriminant validity and reliability. The hypothesized model and hypotheses are tested in Chapter 6.4. The test is divided into two parts, one test of the direct effects and one test of the moderating effects using two-group analysis in LISREL. Finally, the findings are summarized in Chapter 6.5.

## 6.1 DESCRIPTIVE STATISTICS

The starting point of the analysis is an inspection of the data. Two aspects are crucial, normality and missing data for the variables. The descriptive statistics for the sample is presented in Appendix 3.

An assumption for multivariate analysis (e.g., multiple regression with latent variables) is that the variables have a multinormal distribution. A necessary condition is that each of the variables has the kurtosis and skew of a normal variable (Bollen 1989:422). Violation of normality may lead to unreliable overall model fit assessment as well as standard errors for the parameters (Jöreskog and Sörbom 1996:239). According to Muthén and Kaplan (1985), variables with skewnesses and kurtoses between -1 and 1 appear to provide acceptable model estimates. Thus, skewnesses and kurtoses above absolute value 1 are then expected to decrease the reliability of the data analysis. If possible, variables (items) which are highly non-normal should therefore be deleted from further analysis. Kurtosis and skewness will be commented on in the following sections.

First, data for the variables in this study may be described as slightly non-normally distributed with respect to kurtosis. One variable for market orientation information system (item 2.13) has very high values for kurtosis (and skewness). The variable addresses the issue: when the hotel finds out that customers are unhappy with the quality of the service, they would take corrective action immediately. The question appears to be too easy to agree with and thus does not imply a satisfactory variance and normal distribution. The item is deleted from further analysis. Another problem variable is an item for differentiation strategy (see item 4.3) which has a positive kurtosis value of 4.31. However, since the strategy items do not represent crucial importance with respect to standard errors for parameter estimates per se, the item is not deleted but has to be treated with caution. In general, most of the variables are platykurtic with negative kurtosis values down to -1.48 (cf., item 1.14). In terms of absolute values, 32 out of 63 items have kurtosis values less than 1. Accordingly, half of the items exceed the value of acceptable kurtosis. However, the degree of non-normal kurtosis is not considerable but some of the variables have to be treated with caution.

Second, most variables are negatively skewed with the highest value of -1.82 (see item 4.7), if item 2.13 is disregarded (cf., previous section). In terms of absolute values, 44 out of 63 items have skewness values less than 1. Accordingly, skewness represents a smaller

problem in the data but also here skew variables have to be treated with caution in the subsequent analysis.

Although some of the items are non-normal, some of the items will be less problematic since they (1.1 through 2.14) will be part of parcels. In general, parcels will have better normality because the specific problems of single items will to a great extent be ruled out when brought into a parcel (see kurtosis and skewness information for the parcels for the three dimensions of market orientation system, presented in Appendix 3). Furthermore, non-normal variables for a multi-item construct, where most items are close to normally distributed, might be eliminated in the measurement model purification process, and thus, the problem of non-normal variables is reduced.

Missing values for any of the variables do not appear to be a problem in this sample. 245 of the 372 cases are complete. Additionally 57 cases have one variable with missing data. The problematic variables are sales growth and profitability which have a relatively high number of missing values (8.6 and 7.5 % missing cases, respectively). The two variables require specific information that might not be available for the informant during the telephone interview. Additionally, each of the three parcels of market orientation information system has between 31 and 33 missing observations. The reason for this is found in the parceling procedure where listwise deletion of missing data was used. The missing data will be treated as if they are missing by random, and thus, pairwise deletion of missing data is selected for the further analysis of the measurement and structural models.



## 6.2 TEST OF KEY-INFORMANT DATA

As discussed in Chapter 5, the use of key informants to provide data for the model in this study may be questioned. It is a commonly held belief that key informants report biased information of unknown validity and reliability. To assess the quality of information provided by the key informant (hotel manager) in this study, some of the information will be compared with data from other sources for the same construct. In addition to collect data for the model, the key-informants were asked to report the customers' satisfaction with the hotel. For some of the hotels customers' self-reported satisfaction were available, and thus, could be compared with the managers' reports. If the information converged, this would indicate satisfactory data quality, and vice versa.

The data of self-reported customer satisfaction were collected in a separate survey for the 28 of the hotels that participated in the market orientation study. The self-reported customer satisfaction data comes from a survey conducted among guests who have stayed at one of the 28 hotels participating in this study (see Troye, Øgaard, Henjesand 1995; Henjesand 1991). The guests (business travelers) completed a questionnaire at the end of their stay. Completed questionnaires at each hotel vary from less than 50 to more than 100.

The constructs included in the analysis are self-reported customer satisfaction and managers' reported customer satisfaction. Additionally, self-reported customer loyalty is included to assess nomologic validity. *Self-reported customer satisfaction* was assessed by three items, which were all measured by using a 11-point scale, end-points -5 and +5 (very little satisfied to very much satisfied):

SAT1: Satisfaction with this hotel compared to other hotels in the same price category

SAT2: Satisfaction with the hotel with respect to price

SAT3: Overall satisfaction with the hotel

For each of the 28 hotels participating in the study the mean score of the customers' satisfaction for each hotel is computed and used for analysis purposes. *Manager assessed customer satisfaction* was captured by three items for the overall customer satisfaction

(ACSI<sup>27</sup>), adapted from Fornell et al. (1996), and responses were given on a five-points Likert scale:

- Our customers are very satisfied with the hotel
- The customers' expectations are to a great extent exceeded
- Compared to our customers' ideal hotel, the customers are very satisfied with the hotel.

The overall ACSI is computed as the mean for the three items. *Customer loyalty* was included to assess the nomological validity of the other measures in the study. It was a self-reported measure of repurchase intention if the customer returned to the area later. The response was measured on a 10 point scale from very unlikely to very likely.

Table 6.1 reports means, standard deviations, and actual range of each scale. Inspection of Table 6.1 reveals some very interesting findings. The three self-reported customer satisfaction measures (SAT1 through SAT3) are all slightly positive, indicating that overall customers are satisfied, but not extremely satisfied (the scale midpoint is 0, and upper endpoint is +5). However, the mean of the manager assessed customer satisfaction, ACSI, is very close to upper scale-point. This, of course, reduces variable variance as reflected in the modest standard deviation. It is also seen from Table 6.1 that the range (difference between maximum and minimum) is very modest, indicating that the respondents only use a fraction (i.e., three values) of the scale.

**TABLE 6.1**  
**Univariate statistics**

Variable	Mean	SD	Range
SAT 1	1.96	.80	2.98
SAT 2	1.99	.85	3.28
SAT 3	2.67	.74	2.89
ACSI	4.10	.59	2.00
LOYALTY	8.10	.83	4.67

Note. n = 28

<sup>27</sup> The abbreviation means American Customer Satisfaction Index.

The self-reported and the manager assessed customer satisfaction measures are not directly comparable as different ordinal scales and somewhat different wordings were used. The upper-bound for manager assessed customer satisfaction (ACSI) measure may indicate that an inappropriate scale is used to capture the real distribution of the phenomenon. However, it is also likely that the firms (managers) all hold the belief that their customers are satisfied. If the hotel service offerings were all equally good, then this would make sense. However, inspection of self-reported customer satisfaction shows substantial variation across hotels. So it appears that these hotel managers may have a positive bias regarding their own hotels.

Table 6.2 reports Pearson correlation coefficients among self-reported and manager assessed customer satisfaction measures. Additionally, the correlations for customer loyalty ('Loyalty') are included in Table 6.2.

**TABLE 6.2**  
**Bivariate analysis**

	Sat 1	Sat 2	Sat 3	Acsi	Loyalty
Sat 1	-	.87 <sup>c</sup>	.83 <sup>c</sup>	.36 <sup>a</sup>	.63 <sup>c</sup>
Sat 2		-	.90 <sup>c</sup>	.43 <sup>b</sup>	.65 <sup>c</sup>
Sat 3			-	.40 <sup>b</sup>	.80 <sup>c</sup>
Acsi				-	.40 <sup>b</sup>

Note. a)  $p < .10$ ; b)  $p < .05$ ; c)  $p < .01$

Table 6.2 shows that the intercorrelations among the self-reported customer satisfaction measures (SAT1 through SAT3) all are very high, indicating that they all are tapping into the same domain. The correlations between the manager assessed and the self-reported customer satisfaction, marked by a quadrangle, are all positive and statistically significant at the 10 percent level or better. Moreover, the correlation between manager assessed customer satisfaction and customers' self-reported loyalty (repurchase intention) is positive and significant, indicating that the manager's assessment of customer satisfaction, to a certain degree, might be seen as nomologically valid.

Some explanations of the modest correlations between assessed and self-reported customer satisfaction may be offered. First, different use of wordings and scales may explain why the differences occur. Second, the upper-bound for manager assessed customer

satisfaction (ACSI) measure with constrained variance tends to reduce the empirically observed correlation coefficients. Third, assuming a non-perfect reliability for the variables, the correlation coefficients reported in Table 6.2 may be attenuated (see Zeller and Carmines 1980). However, it is also likely that managers are only capable of making crude assessments of how satisfied their customers are, in particular when confronted with multiple, and heterogeneous, customers as in the present case.

The data analysis seems to indicate that the data collected from the hotel managers gives reasonably valid information about the hotel's customer satisfaction. Although no test of data quality is made for the variables in the model of the study, there is no reason to believe that the data quality should be different with respect to other variables regarding product adaption, competitive strategy, market orientation, profitability, sales growth and relative price obtained in the market. Accordingly, the assessment made above at least does not provide any alarming evidence that the data quality is problematic due to the use of key informants in this study.

## **6.3 TEST OF THE MEASUREMENT MODEL**

According to Anderson and Gerbing (1988) the measurement model should get acceptable fit before testing the structural model. Without a measurement model with satisfactory fit to the data it will not be possible to know whether lack of fit is due to misspecification of the measurement model or the structural relations among the latent variables. The test of the measures will be performed in two steps. First, the formative measures for each of the three dimensions of market orientation information system are parceled. Second, the subsequent test of the measurement model will be to include all the measures and parcels of the constructs in the model to assess unidimensionality and model fit. Respecifications done to meet the requirements of a satisfactorily fitting model are reported and considered. Finally, analysis of discriminant validity of the constructs and reliability of the measures for the measurement model is reported.

### **6.3.1 Validation of the market orientation information system scale**

The scale for the dimensions of market orientation information system is considered to be formative since the more of the activities the organization performs the more market oriented the firm becomes (see Chapter 5.5). Thus, the indicators determine the dimension rather than the reverse. For example, if some of the activities for information generation increase, the information generation dimension increases, even if some of the other indicators for the dimension do not change. The firm may also find the different activities in the scale to be interchangeable. Accordingly, for a given level of each of the dimensions the firm may use different configurations of means (i.e., items). Some companies can make use of formal data gathering systems while others may prefer informal ways (e.g., customer visits) to gather market information. Additionally, the measures may be nonlinearly related to the latent construct indicating that the different means may be of different difficulty (see Singh 1996). For example, less companies poll end users at least once a year to assess the quality of products and services than periodically review the likely effect of changes in the business environment (e.g., VAT, new alliances, new patterns of travel) on customers (see Appendix 3). Consequently, the items for each of the three dimensions do not have to be highly correlated to

satisfy the requirement of being valid indicants of market orientation (cf., Bollen and Lennox 1991). Thus, omitting indicants based on classical test theory (cf., the requirement of unidimensionality) may be omitting a part of the construct.

A principal-component analysis is conducted to identify the facets for each of the three dimensions of market orientation information system. The purpose of the analysis is to construct linear combinations of the indicants which account for a large proportion of total variance<sup>28</sup>. Each principal component represents a facet of the dimension. For dimensions with more than one facet, each facet is weighted equally within the parcel to secure that no particular facet dominates the dimension. Accordingly, the value for each dimension (i.e., parcel) is a function of unique information (i.e., facets) and not a result of the number of items that represent each facet. The analyses are reported in Appendix 4. Based on the analyses, the information generation consists of one component, information dissemination consists of two components, and responsiveness consists of three components. One item (in-house market research) for the information generation is excluded because it loaded on a separate component. There is no obvious reason why the item should constitute a second component in this industry, and thus, the item was deleted.

The parcels contain indicants with measurement errors. Since the indicants are parcelled for each of the dimensions, the unidimensionality and reliability of the items are unknown (Bollen and Lennox 1991; Gerbing and Anderson 1988; Howell 1987). On the other hand, the measures for each dimension of market orientation information system have a satisfactory face validity (Jaworski and Kohli 1993) and parcels have better reliability (Bollen and Lennox 1991) and normality (see the descriptive statistics in Appendix 3) than single items.

The three parcels constitute the three dimensions of market orientation information system and are treated as reflective indicants of the construct to accomplish the construct's interactive syndrome content (see Chapter 3.3.1). The test of the measurement model for market orientation information system will be done together with the measures for the other constructs in the model, and the process is described in the next section.

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<sup>28</sup> The principal component analysis extracts principal components (PC) identifying weights ( $W_i$ ) for each of the indicants ( $X_i$ ) to maximize the variance of the component. Thus, the first component can be written:  $PC_1 = W_{11}X_1 + W_{12}X_2 + \dots + W_{1n}X_n$ .

## 6.3.2 Testing the entire measurement model

Testing an entire measurement model implies the choice of test strategy, which is discussed in Section 6.3.2.1. The test strategy is applied to assess the goodness of fit and respecifications of the measurement model in Section 6.3.2.2. The assessment continues with an analysis of the discriminant validity of the constructs used in the model, which is described in Section 6.3.2.3. Finally, the reliability of the measures is analysed and discussed in Section 6.3.2.4.

### 6.3.2.1 Test strategy

Testing the entire measurement model is a test of to which degree the latent variables are reflected by the measures. A good measurement model should be able to explain (and reproduce) the observed variances and covariances in the population or the sample. In other words, the more information (i.e., the discrepancy between the number of unique, off-diagonal, observed covariations and estimated parameters) the estimated model is based on, the more accurate the estimation (Browne and Cudeck 1993). Using structural equation modeling, one can test for a theory's ability to reproduce the observed covariation matrix. Formally stated, the more discrepancy between the estimated covariations  $\Sigma(\theta)$  derived from the theory<sup>29</sup> (i.e., the proposed measurement model) and the true covariations  $\Sigma$ , the less likely the measurement model is to be true for the population.

The test of the measurement model (theory) is a confirmatory factor analysis model that places no constraints on the relationships between the latent variables and only tests the specified relations (and lack of relations) between indicators and latent variables (Anderson and Gerbing 1988). The confirmatory factor analysis measurement model is equivalent to a structural equation model in which all paths between latent variables are freed (in a recursive model). Accordingly, fit or misfit of the model occurs due to the measurements and does not

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<sup>29</sup> The term theory is most often used regarding structural models. However, a measurement model may also be a theory, in which the researcher proposes the latent variables to cause (or to be caused by) the measures following an a priori specified pattern (Bollen 1989).

relate to the structure of the hypothesized model. To assess the goodness-of-fit of the measurement model four fit indices are applied in this study<sup>30</sup>.

The Chi-square is a measure of perfect fit (i.e., to which degree the measurement model accounts for the observed correlations among the indicants). Moreover, the adjustment for random sampling error is for the likelihood that the observed sample based covariations,  $S$ , are different from the estimated covariations,  $\Sigma(\theta')$ . Therefore, the test of the theory is  $P(H_0: \Sigma = \Sigma(\theta)) = \text{true}$  (accounted for the random sampling error). The strength of the test is a function of the sample size, since a larger sample size entails a smaller confidence interval of the  $H_0$ . The sample size of 372 in this study is relatively high, and thus, lack of perfect fit will be penalized to a great extent. Therefore, other fit indices are necessary to assess various aspects of the model's fit to data.

Root mean square error of approximation (RMSEA) is used to evaluate model fit because a perfect measurement model as well as a perfect structural model are known a priori to be false. Browne and Cudeck (1993:137) argue that:

“In applications of the analysis of covariation structures in the social sciences it is implausible that any model that we use is anything more than an approximation to reality. Since a null hypothesis that a model fits exactly in some population is known a priori to be false, it seems pointless even to try to test whether it is true. If the sample size is sufficiently large in a practical investigation, it can be expected that even models that approximate the covariance matrix closely will be rejected.”

According to Browne and Cudeck (1993:146) a test of close fit with a corresponding statistical test is most realistic. The test procedure provided by Browne and Cudeck is RMSEA where  $H_0: \sqrt{(F_0/d)} \leq 0.05$ , where  $F_0$  is the chi-square distributed fit function of the model, and  $d$  is the degrees of freedom of the model. Consequently, RMSEA rewards parsimonious measurement (and structural) models. This is an important issue since testing structural equation models is a more accurate a test of overidentified restrictions (i.e., the more degrees of freedom the stronger, and more risky, the test of the theory). According to Anderson and Gerbing (1988) a measurement model is less theory driven than a structural model, and thus, *post hoc* respecifications are often necessary. RMSEA may be a means to find the balance between a

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<sup>30</sup> The choice of these measures of fit is consistent with proposed measurement template for Journal of Marketing Research. The template suggests chi-square, CFI and NFI (the predecessor of NNFI). RMSEA was launched after the template was published and is not considered as part of the measurement model assessment requirement but strongly recommended by Browne and Cudeck (1993).



parsimonious (interpretable) and well-fitting measurement model. Finally, RMSEA has a known sampling distribution and can, therefore, be applied as a test statistic. Therefore, the RMSEA-test is a test of the likelihood of the theory to be an acceptable approximation of the data (i.e., the real world phenomenon).

Additionally, two relative fit indices are recommended to be used in conjunction with absolute fit indices (here: Chi-square and RMSEA). Such indices are Non Normed Fit Index (NNFI) and Comparative Fit Index (CFI). These fit indices are based on three sources of information: the sample covariance matrix, the reproduced covariance matrix and the null model as an anchor for describing fit (Tanaka 1993). The null model is a model with uncorrelated variables. The logic of NNFI and CFI is 'that no more complicated model can be hypothesized for data if the data supports the mutual uncorrelatedness model' (Tanaka 1993:26). Additionally, both CFI and NNFI are different regarding to which extent they are population based (CFI), in favor of simple models (NNFI), and sample size dependent (CFI), and thus, complementary. Following the Monte Carlo evaluations and accompanying recommendations by Gerbing and Anderson (1993), NNFI and CFI are good and supplementary candidates for overall assessment of fit. Accordingly, the four fit indices are used in the evaluation of the measurement model and the respecified models in this study.

### **6.3.2.2 Measurement model assessment**

The a priori measurement model consists of all initial measures used in the data collection (see Chapter 5.5). For the market orientation information system, the original measures are represented by three parcels. The measurement model has no cross-loadings or correlated error terms. The test of the a priori measurement model (Model 1 in Table 6.3) shows that it does not satisfactorily fit the data. The chi-square value compared to degrees of freedom has a ratio above 2, which is above the rule of thumb for acceptable fit (Bollen 1989). RMSEA also indicates that the fit is not satisfactory and is more than the proposed cut-off for close fit of 0.05. For NNFI and CFI, the values should be greater than 0.9 to represent a satisfactory model fit (Hu and Bentler 1995), and the measurement model is not able to meet such a requirement. To find a measurement model that may fit the data some respecifications

have to be made. The most unproblematic strategy is to delete items which have low factor loadings because such items do not sufficiently reflect the intended construct (Anderson and Gerbing 1988).

The first respecification is done by excluding the items with low factor loadings. Six items have low factor loadings (below 0.35). Two items for market orientation means alteration is excluded. Items 3.4 and 3.5 represent disagreement within the management team and the employees' questioning of the management's interpretation of the market, respectively. The measures might be framed too negatively, indicating aspects like distrust and destructive conflict, which is not part of the construct. Moreover, item 3.8 has a low factor loading and is a claim that the company focuses entirely on current customers. The measure might be a too extreme (reversed) measure of market orientation domainwidth, and thus, is excluded. Additionally, items 3.13 and 3.14 have low factor loadings. They represent two out of three system dependence facets of market orientation tacitness. The remaining three items represent codifiability, system dependence and process observability, respectively. Accordingly, the construct does not lose any facets when deleting the two items. Finally, item 5.7 has a modest factor loading (0.45) and the modification indices report correlated error terms with other items. The item is a measure of to which degree the benefits of the product are easy for the customer to see. It is the most peripheral measure of product adaption and can easily be deleted. The respecifications are included in Model 2. The model receives slightly satisfactory values of chi-square and RMSEA, but not satisfactory NNFI and CFI values.

To further improve the fit, item 3.6 is omitted due to low factor loading (0.40). The item regards extensive data collection from customer groups which are not currently served. The item is supposed to represent market orientation domainwidth but might be a too specific (i.e., extensive data collection) component of the construct. Furthermore, based on the modification indices, the items 5.3 (the hotel is better than the competitors at satisfying the needs of the customers) and 5.6 (the benefits of the company are easy to communicate to the customers) for product adaption are out due to crossloadings. Since Model 2 has six indicants for product adaption it is an appropriate strategy to eliminate the most troublesome ones. Additionally, the error terms of item 3.1 (discussions among the employees about how the company should map the needs of customers) and market orientation information system dissemination are correlated. This may be justified since item 3.1 may serve as an element of information dissemination as well as an indicant for market orientation means alteration.

According to Kumar and Dillon (1987) it is acceptable to adjust for correlations among the error terms for items within and across constructs without losing unidimensionality. The use of structural equation modeling enables the use of both systematic and random measurement errors when they are accounted for in the measurement model. The respecified measurement model as represented by Model 3 achieves a slightly better fit for all of the fit indices.

However, the model scores poorly on NNFI.

The respecification is based on the information from the modification indices, and this shows that item 4.4 is problematic because it crossloads on the product adaption construct. Item 4.4 is about to which extent the hotel attempts to have a more extensive customer service than the average for the industry, and the item is proposed to be an indicant for differentiation strategy. Since the item is not solely a reflector of the strategy construct it is excluded from the measurement model. The respecified model, Model 4, obtains a better fit for all fit indices but still does not satisfy the NNFI requirement.

The final respecification of the measurement model comprises correlated error terms. Based on information from the modification indices, four correlated error terms are free to covary. (1) The first correlation is within the product adaption construct, which has four remaining indicants. The four items are unique attributes not available from competitive products (item 5.1), value for money for the customer (item 5.2), excellent product quality relative to competitors' products (item 5.4), and the company's product benefits are easily perceived as being useful by the customer (item 5.6). Item 5.1 and 5.4 both capture product adaption relative to competitors and thus may justify that they share common variance in addition to both being indicants of product adaption. Accordingly, the correlated error terms are allowed to be free between the two items.

The second and third correlations include item 4.5, which is relative price. (2) The error term of the item is positively correlated with item 4.7 of overall cost leadership strategy, namely the company's quality of cost control relative to competitors. The covariation between the overall cost leadership and relative price constructs is negative. The correlation between the two error terms of relative price and cost control may then occur due to misspecification. It is expected that companies with highly priced products also emphasize cost control to accomplish that extended service and product benefits are performed within acceptable range of costs (see Porter 1980). Notably, cost control does not solely imply low cost (item 4.6), and thus, correlated error terms are allowed. (3) Moreover, item 4.5 is positively correlated with

item 4.2, which is a firm's relative reputation, a differentiation strategy measure. The shared variance may be attributed to the fact that reputation and price are the two extrinsic cues in the total set of indicants. It is reasonable that price and reputation are positively related (see e.g., Zeithaml 1988), and thus, the correlated error terms between the two items are allowed.

(4) The fourth correlated error term is positive and is between item 5.4 (the company provides a better overall product compared with the competitors) and item 4.7 (better cost control). Since the quality of the cost control does not necessarily imply low cost (which is the idea of the overall cost leadership construct), the shared variance between cost control and overall product quality may share some of the same internal processes and emphases, for example, total quality management. The error terms between the two items are allowed to be free to covary. No further respecifications are proposed for the model.

Model 5 fits well to the data. All fit indices are above the suggested cut-off values for satisfactory fit. The P-value for chi-square is not significant but since this measure of fit is sample size sensitive<sup>31</sup> a non-significant chi-square value for a moderately large sample size should not be of too much concern since the other fit indices indicate good fit. The RMSEA-value is 0.035, which is below 0.05, the cut-off for close fit. The NNFI and CFI values are 0.92 and 0.94, respectively, which are above the 0.90 requirement. Accordingly, Model 5 meets the requirement of a well-fitting measurement model and thus will be applied in the structural analysis. Since the model has significant lambdas for all of the indicants, no cross-loadings, and a few justified correlated error terms, the measures in the model have a satisfactory unidimensionality (cf., Kumar and Dillon 1987). The next analysis concerns the discriminant validity and non-redundancy of the constructs.

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<sup>31</sup> Critical N (CN) is 315, indicating that for a sample size of 315 (and less) the model would have been significant at 1%-level for the chi-square value of the model.

**TABLE 6.3**  
**Fit indices of measurement models**

Model	Goodness-of-Fit	Specifications
Model 1	Chi-Square = 1027.17 (p=0.0) Degrees of Freedom = 485 RMSEA = 0.055 NNFI = 0.75 CFI = 0.78	A priori measurement model
Model 2	Chi-Square = 574.88 (p=0.0) Degrees of Freedom = 308 RMSEA = 0.048 NNFI = 0.85 CFI = 0.87	Items 3.4, 3.5, 3.8, 3.13, 3.14, and 5.7 are out due to low factor loadings
Model 3	Chi-Square = 399.43 (p=0.0) Degrees of Freedom = 232 RMSEA = 0.044 NNFI = 0.88 CFI = 0.91	Item 3.6 is out due to low factor loading and items 3.1, 5.3 and 5.6 are out due to cross-loadings. The error terms for items 3.1 and market orientation dissemination are set free to be correlated.
Model 4	Chi-Square = 351.84 (p=0.0) Degrees of Freedom = 209 RMSEA = 0.043 NNFI = 0.89 CFI = 0.92	Item 4.4 is out due to crossloadings.
Model 5	Chi-Square = 300.7 (p=0.0) Degrees of Freedom = 205 RMSEA = 0.035 NNFI = 0.92 CFI = 0.94	The error term for item 4.5 is free to correlate with items 4.2 and 4.7. The error term for item 5.4 is free to correlate with items 5.1 and 4.7.

### 6.3.2.3 Discriminant validity

Discriminant validity of the constructs deals with to which extent the constructs are different from each other, and thus, non-redundant. If the constructs are highly correlated, the discriminant validity is violated. Assessment of discriminant validity of the latent construct can be made by using the 95%-confidence interval around the correlation estimates for each of the constructs,  $\xi$ 's. If none of the confidence intervals include 1.0, no pairs of the constructs are perfectly correlated within the range of random sampling error. In such cases, discriminant validity can be claimed (Anderson and Gerbing 1988; Bagozzi and Yi 1988). Table 6.4 reports the correlations among the constructs. None of the correlations  $\pm$  two standard errors include 1, and thus, discriminant validity of the constructs is claimed to be satisfactory.

**TABLE 6.4**  
**Estimated correlation matrix among the constructs**

	Profit	Sales Growth	Product Adaption	Relative Price	Differentiation Strategy	Overall Cost Leadership	Market Orientation Means Alteration	Market Orientation Domainwidth	Market Orientation Tacitness
Sales Growth	0.47 <sup>a</sup> (0.04) <sup>b</sup>								
Product Adaption	0.19 (0.06)	0.25 (0.06)							
Relative Price	-0.10 (0.05)	-0.07 (0.05)	-0.30 (0.06)						
Differentiation Strategy	0.17 (0.06)	0.20 (0.06)	0.56 (0.06)	0.10 (0.06)					
Overall Cost Leadership	0.21 (0.06)	0.16 (0.06)	0.22 (0.07)	-0.35 (0.13)	0.64 (0.07)				
Market Orientation Means Alteration	-0.05 (0.07)	-0.02 (0.07)	0.05 (0.08)	0.02 (0.06)	0.13 (0.08)	0.06 (0.08)			
Market Orientation Domainwidth	-0.03 (0.07)	0.13 (0.07)	0.31 (0.09)	-0.01 (0.07)	0.12 (0.08)	0.21 (0.08)	0.49 (0.09)		
Market Orientation Tacitness	-0.03 (0.07)	0.03 (0.07)	0.47 (0.08)	0.17 (0.07)	0.45 (0.07)	0.36 (0.08)	0.13 (0.09)	-0.14 (0.10)	
Market Orientation Information System	0.17 (0.06)	0.31 (0.05)	0.53 (0.06)	0.23 (0.06)	0.54 (0.06)	0.39 (0.07)	0.63 (0.06)	0.53 (0.07)	0.41 (0.07)

Note. <sup>a</sup> : standardized estimated correlation coefficient; <sup>b</sup> : standard error

### 6.3.2.4 Reliability information

Reliability is the consistency of a measurement (Bollen 1989). In general, reliability assessment is a ratio of true (i.e., the intended construct) score's variance to the observed variable's variance. Bagozzi and Yi (1988) propose three reliability measures: item reliability, average variance extracted and composite reliability. Item reliability is stated as follows:  $\rho_i = \lambda_i^2 \text{var}T / (\lambda_i^2 \text{var}T + \theta_{ii})$ , where T is the construct ( $\eta$  or  $\xi$ ) reflected by the item. As can be read from the formula, item reliability is the squared standardized factorloading, and thus, provides information about the percentage of the variance for the item explained by the construct. To use the item reliability measure each of the items should only reflect one latent construct. This requirement holds in the measurement model for this study. Bagozzi and Yi (1988:80) suggest that item reliability values should be above 0.5 but emphasize that 'it is not possible to suggest even loose rule-of-thumb as to adequate sizes'.

Closely related to item reliability, another reliability measure is the amount of average variance extracted for each of the constructs. The measure is defined as:

$\rho_v = \sum \lambda_i^2 \text{var}T / (\sum \lambda_i^2 \text{var}T + \sum \theta_{ii})$ . According to Bagozzi and Yi (1988) average variance extracted should exceed 0.5. The third measure of reliability, Composite reliability, is measured as follows:  $\rho_c = (\sum \lambda_i)^2 \text{var}T / ((\sum \lambda_i)^2 \text{var}T + \sum \theta_{ii})$ . The summation is over the items that form the latent variable (c.f., composite). Composite reliability should exceed 0.6 to be satisfactory (Bagozzi and Yi (1988)).

Reliability information for the measures and constructs is reported in Table 6.5. The composite reliability is satisfactory for all constructs except market orientation means alteration, market orientation domainwidth and market orientation tacitness. All constructs fail on the Average variance extracted and Item reliability criteria. Accordingly, the reliability for the measures is not good. However, high reliability implies high inter-correlations within a construct. Using measures with high inter-correlations is not sufficient if the measures are not able to capture all facets of the construct (Bollen and Lennox 1991). Additionally, lack of high reliability is to a great extent accounted for when using structural equation modeling (Jöreskog and Sörbom 1982). Therefore, all items are included in the model to maintain the domain of the constructs.

**TABLE 6.5**

**Reliability information for the measurement model**

Item <sup>a</sup>	Factor loading <sup>b</sup>	T-value	Error term <sup>b</sup>	T-value	Item reliability	Average variance extracted	Composite reliability		
Profit									
A6	$\lambda_{1,1}$	1.00	27.24	$\theta_{1,1}$	-	-	-		
Sales Growth									
A7	$\lambda_{2,2}$	1.00	27.24	$\theta_{2,2}$	-	-	-		
Product Adaption									
A5.1	$\lambda_{3,3}$	0.41	6.77	$\theta_{3,3}$	0.83	12.42	0.17	0.30	0.63
A5.2	$\lambda_{4,3}$	0.65	11.42	$\theta_{4,4}$	0.58	9.70	0.42		
A5.4	$\lambda_{5,3}$	0.52	8.81	$\theta_{5,5}$	0.73	11.52	0.27		
A5.6	$\lambda_{6,3}$	0.60	10.63	$\theta_{6,6}$	0.64	10.54	0.36		
Relative Price									
A4.5	$\lambda_{7,4}$	1.00	27.38	$\theta_{7,7}$	-	-	-	-	-
Differentiation									
Strategy									
A4.1	$\lambda_{8,5}$	0.61	11.69	$\theta_{8,8}$	0.62	11.46	0.38	0.48	0.73
A4.2	$\lambda_{9,5}$	0.67	12.90	$\theta_{9,9}$	0.55	10.63	0.45		
A4.3	$\lambda_{10,5}$	0.77	15.34	$\theta_{10,10}$	0.40	8.16	0.60		
Overall Cost Leadership									
A4.6	$\lambda_{11,6}$	0.44	7.36	$\theta_{11,11}$	0.81	12.18	0.19	0.47	0.61
A4.7	$\lambda_{12,6}$	0.86	10.97	$\theta_{12,12}$	0.26	2.19	0.74		
Market Orientation Means									
Alteration									
A3.1	$\lambda_{13,7}$	0.43	7.15	$\theta_{13,13}$	0.81	12.08	0.19	0.30	0.55
A3.2	$\lambda_{14,7}$	0.71	10.84	$\theta_{14,14}$	0.50	6.53	0.50		
A3.3	$\lambda_{15,7}$	0.45	7.42	$\theta_{15,15}$	0.79	11.84	0.21		
Market Orientation									
Domainwidth									
A3.7	$\lambda_{16,8}$	0.46	7.04	$\theta_{16,16}$	0.79	11.38	0.21	0.26	0.51
A3.9	$\lambda_{17,8}$	0.54	8.21	$\theta_{17,17}$	0.71	10.07	0.29		
A3.10	$\lambda_{18,8}$	0.52	8.04	$\theta_{18,18}$	0.73	10.31	0.27		
Market Orientation									
Tacitness									
A3.11	$\lambda_{19,9}$	0.61	9.28	$\theta_{19,19}$	0.62	8.47	0.38	0.27	0.52
A3.12	$\lambda_{20,9}$	0.52	8.12	$\theta_{20,20}$	0.73	10.48	0.27		
A3.15	$\lambda_{21,9}$	0.42	6.52	$\theta_{21,21}$	0.83	11.90	0.17		
Market Orientation									
Information System									
Generation	$\lambda_{22,10}$	0.79	16.27	$\theta_{22,22}$	0.38	8.42	0.62	0.49	0.74
Dissemination	$\lambda_{23,10}$	0.66	13.23	$\theta_{23,23}$	0.56	11.25	0.44		
Responsiveness	$\lambda_{24,10}$	0.65	12.77	$\theta_{24,24}$	0.58	11.38	0.42		
				$\theta_{5,3}$	0.15	3.10			
				$\theta_{9,7}$	0.14	3.29			
				$\theta_{12,7}$	0.38	3.32			
				$\theta_{12,5}$	0.14	3.63			
				$\theta_{23,13}$	0.20	4.75			

Note. <sup>a</sup> : The item abbreviation refers to the item list in Appendix 3; <sup>b</sup> : Standardized coefficients



It is not possible to consider reliability for single item measures. However, it may be possible to choose an error term,  $\theta_e$ , of .1 or .15 for all single indicators since no measures are believed to be without random error term (Anderson and Gerbing 1988; Jöreskog and Sörbom 1982). On the other hand, a nonzero error specification is expected to increase the variance explained for the construct (Jöreskog and Sörbom 1982), and thus, might be undesirable (see Dillon and Goldstein 1984). The single indicant models in the study are all endogenous variables, and thus, already have an error term associated with the latent construct (the  $\psi$ -matrix). Accordingly, any measurement errors may be (partially) accounted for there, and thus, no further modifications are made regarding measurement errors for single indicants.

## 6.4 STRUCTURAL ANALYSIS

Structural equation modeling (SEM) will be used as the approach to test the theory and the hypotheses. There are three reasons for this choice. *First*, SEM combines the measurement model and the structural model into the same analysis, and therefore, avoids the interpretation of structural parameters for a model with unknown construct validity and reliability which can give inaccurate estimates and lead to misleading conclusions. The measurement model chosen in this study has some measures with correlated error terms. To avoid biased regression estimates, it is important to simultaneously perform the measurement and structural analysis, which SEM does. Moreover, the measurement model has some measures with low reliability. Although it is a widely-held belief that random measurement error leads to attenuation (i.e., underestimation of structural parameters) and a conservative test of the hypothesis, such effect is only true in the case of bivariate regression. Using multiple independent constructs, the direction of bias is a function of the amount and direction of correlations among the constructs (Bollen 1989). Consequently, the estimation of structural effects for constructs with measurement errors is believed to be less biased when using SEM.

*Second*, SEM gives relevant information when there is interdependence or simultaneous causation among the observed response variables (Jöreskog and Sörbom 1982). The proposed model (cf., Figure 4.2) includes four endogenous constructs. The four constructs are interrelated, and thus, deal with interdependency. In contrast to other methods, SEM is an analysis of the model in addition to the hypotheses. The relationship between two constructs is not only dependent on which other exogenous constructs are included but also which endogenous constructs are in the set of equations. *Third*, SEM provides an assessment accompanied by statistical tests of the overall model fit as well as for each of the free parameters. As emphasized by Jöreskog (1993), interpreting 'significant' parameters from a model with unknown fit can be misleading. Many factors can lead to a significant path (see Meehl 1990 for a comprehensive discussion of these factors), and thus, the entire theory should hold first.

The structural analysis will be made through three steps. *First*, the direct effects of the model will be tested. *Second*, the test of the moderating effect of competitive strategy on the relationships between market orientation and product adaption is done using a two-group

analysis approach. To assess overall fit of the structural model the same fit indexes as for the measurement model are made use of: Chi-square, RMSEA, NNFI, and CFI.

The results from the model of direct effects are shown in Table 6.6. The model is a test of all hypotheses except hypothesis 5. Additionally, competitive strategy serves as a control variable in the model. Differentiation strategy and Overall cost leadership are free to covary with the market orientation constructs and with each other. They have direct paths to product adaption. Overall cost leadership also has direct paths to profitability and relative price. The fit of the structure model is satisfactory and all of the fit indices report values above the suggested requirements.

The impact of market orientation and competitive strategy on product adaption is considerable, explaining 71 percent of the variance in product adaption. The market orientation information system has a significant positive impact on product adaption ( $\gamma^s_{11} = 0.49$ ,  $P < 0.025$ ). This finding supports hypothesis 1. Market orientation domainwidth has a significant and positive impact on product adaption ( $\gamma^s_{12} = 0.38$ ,  $P < 0.05$ ) and is consistent with what was expected from hypothesis 2. The impact of Market orientation means alteration is considerable ( $\gamma^s_{13} = -0.53$ ) but in opposite direction of what was expected from hypothesis 3, and thus, the hypothesis is not supported. Moreover, Market orientation tacitness has a positive and significant effect on product adaption ( $\gamma^s_{14} = 0.32$ ,  $P < 0.025$ ), which is consistent with hypothesis 4. As could be expected, differentiation strategy has positive impact on product adaption ( $\gamma^s_{15} = 0.42$ ) and overall cost leadership has a negative impact ( $\gamma^s_{16} = -0.34$ ).

Product adaption was proposed to positively affect relative price (hypothesis 6). This effect is supported in the study ( $\beta^s_{31} = 0.43$ ,  $P < 0.001$ ). Additionally, product adaption was also proposed to positively affect sales growth (hypothesis 7), which is supported in the study ( $\beta^s_{21} = 0.33$ ,  $P < 0.001$ ). Moreover, sales growth was hypothesized to have a positive impact on profitability (hypothesis 8). The effect is positive and significant ( $\beta^s_{42} = 0.44$ ,  $P < 0.001$ ). Relative price was hypothesized to have a positive impact on profitability (hypothesis 9) and a negative impact on sales growth (hypothesis 10). The effect on profitability is positive and significant ( $\beta^s_{43} = 0.09$ ,  $P < 0.05$ ). The effect of relative price on sales growth ( $\beta_{23}$ ) is not significant. The information from the modification indices does report, however, that more paths in the model would *not* improve the model fit. Therefore, the mediating roles of product

adaption, relative price and sales growth between market orientation and profitability are supported.

**TABLE 6.6**  
**Structural Model of the Effects of Market Orientation**

Goodness-of-fit indices:

Chi-Square = 341.84 (p=0.0)  
 Degrees of Freedom = 222  
 RMSEA = 0.038  
 NNFI = 0.91  
 CFI = 0.93

	$\zeta_1$	$\zeta_2$	$\zeta_3$	$\zeta_4$	$\zeta_5$	$\zeta_6$	$\eta_1$	$\eta_2$	$\eta_3$	Squared Multiple Correlations
$\eta_1$	0.49 <sup>a</sup> (2.17) <sup>b</sup>	0.38 (1.87)	-0.53 (2.91)	0.32 (1.99)	0.42 (2.60)	-0.34 (2.41)				0.71
$\eta_2$							0.33 (4.18)		-0.06 (1.09)	0.10
$\eta_3$						-0.31 (2.77)	0.43 (4.53)			0.21
$\eta_4$						0.14 (2.47)		0.44 (9.59)	0.09 (1.92)	0.24

$\zeta_1$  : Market Orientation Information System  
 $\zeta_2$  : Market Orientation Domainwidth  
 $\zeta_3$  : Market Orientation Means Alteration  
 $\zeta_4$  : Market Orientation Tacitness  
 $\zeta_5$  : Differentiation Strategy  
 $\zeta_6$  : Overall Cost Leadership  
 $\eta_1$  : Product Adaption  
 $\eta_2$  : Sales Growth  
 $\eta_3$  : Relative Price  
 $\eta_4$  : Profitability

<sup>a</sup> : Standarized regression coefficients  
<sup>b</sup> : T-values

To test the moderating effect of competitive strategy the sample is divided into two groups. Based on an index of differentiation strategy divided on overall cost leadership strategy, companies with a score higher than one were assigned to the differentiation strategy group and companies with a score less than one were assigned to the overall cost leadership

strategy group<sup>32</sup>. Since many companies hold an equal emphasis of both overall cost leadership strategy and differentiation strategy (see Miller 1992), the sample size is reduced to 281 companies from the 372 companies that were used for testing the direct effects. The number of companies with a differentiation strategy emphasis was 191 while 90 companies held an overall cost leadership strategy emphasis.

When comparing structural parameters and means across groups it is assumed that the measurement model is the same for each group,  $\Lambda x^{(1)} = \Lambda x^{(2)} ; \Theta_{\delta}^{(1)} = \Theta_{\delta}^{(2)}$  (Marsh and Hocevar 1985; Drasgow and Kanfer 1985; Bagozzi and Yi 1989). The argument is that to interpret structural parameters from several groups, the measures have to be invariant in order to be comparable. The intercepts of the items,  $\tau_y$ , are held invariant and the intercepts of the constructs,  $\alpha$ , are held non-invariant over the two groups (Jøreskog and Sörbom 1989). The other parameters, measurement errors (theta,  $\Theta$ ), factor loadings (lambda,  $\Lambda$ ), and variance-covariance (phi,  $\Phi$ ) expected in one group can be expected to be different for the other group, and thus, are specified to be of the same pattern but non-invariant across the two groups. The test of the equivalence of the measurement model across the two groups,  $H_0 : \Sigma^{(1)} = \Sigma^{(2)}$ , is reported in Table 6.7.

The measurement model for the two groups does not achieve a good fit. The NNFI and CFI values are below 0.91, which is the suggested rule-of-thumb for good fit. Using RMSEA, the value of 0.059 indicates a reasonable fit (Browne and Cudeck 1993). Although the chi-square is not significant, the ratio of chi-square to degrees of freedom is less than two, and thus, a reasonable fit is assumed (Bollen 1989). To improve the model fit of the measurement model, different measurement models for the two groups may be necessary to consider (cf., Byrne, Muthen, and Shavelson 1989). However, to use the same measurement model for the moderating effects as was used for the direct effects is desirable from an interpretation point of view. Since the model gives a reasonable fit to the data in the two groups, no modification of the measurement model is made.

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<sup>32</sup> Relative emphasis was computed:  $((A4.1+A4.2+A4.3)/3) / ((A4.6+A4.7)/2)$ .

**TABLE 6.7**  
**Two-Group Measurement Model**

Parameter	Differentiation Emphasis	Across Groups	Overall Cost Leadership Emphasis
<b>FACTOR STRUCTURE</b>			
Profit			
$\lambda_{1,1}$		1.00	
Sales Growth			
$\lambda_{2,2}$		1.00	
Product Adaption			
$\lambda_{3,3}$		1.00	
$\lambda_{4,3}$	0.36 (3.89)		1.52 (6.71)
$\lambda_{5,3}$	0.76 (3.57)		1.25 (6.60)
$\lambda_{6,3}$	0.54 (4.08)		1.49 (6.74)
Relative Price			
$\lambda_{7,4}$		1.00	
Market Orientation Means Alteration			
$\lambda_{8,5}$		1.00	
$\lambda_{9,5}$	1.02 <sup>a</sup> (4.93) <sup>b</sup>		1.17 (4.77)
$\lambda_{10,5}$	0.51 (3.91)		1.07 (4.27)
Market Orientation Domainwidth			
$\lambda_{11,7}$		1.00	
$\lambda_{12,7}$	1.16 (3.87)		1.18 (5.09)
$\lambda_{13,7}$	1.16 (3.67)		0.98 (4.99)
Market Orientation Tacitness			
$\lambda_{14,8}$		1.00	
$\lambda_{15,8}$	0.70 (3.84)		1.05 (9.37)
$\lambda_{16,8}$	0.59 (3.32)		0.99 (9.13)
Market Orientation Information System			
$\lambda_{17,9}$		1.00	
$\lambda_{18,9}$	0.75 (8.59)		0.96 (12.55)
$\lambda_{19,9}$	0.52 (9.23)		1.05 (14.24)

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**CORRELATED  
ERROR TERMS**

	0.05	1.95
$\theta_{\epsilon_{5,3}}$	(0.71)	(1.48)
$\theta_{\epsilon_{18,8}}$	0.05	2.85
	(1.34)	(3.36)

**MEAN  
DIFFERENCES**

		-2.40
$\alpha_1$ (Profit)	0	(5.25)
$\alpha_2$ (Sales Growth)	0	-2.50
		(5.80)
$\alpha_3$ (Product Adaption)	0	-2.52
		(6.44)
$\alpha_4$ (Relative Price)	0	-0.70
		(1.52)
$\alpha_5$ (Market Orientation Means Alteration)	0	-1.91
		(4.98)
$\alpha_6$ (Market Orientation Domainwidth)	0	-1.72
		(5.25)
$\alpha_7$ (Market Orientation Tacitness)	0	-3.36
		(10.89)
$\alpha_8$ (Market Orientation Information System)	0	-3.20
		(12.88)

**GOODNESS OF  
FIT INDICES**

Chi-square	387.50
	(P=0.00)
Degress of Freedom	261
RMSEA	0.059
NNFI	0.84
CFI	0.88

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Note. <sup>a</sup> : Unstandarized estimate; <sup>b</sup> : T-value

The test of the moderating effects of competitive strategy on the relationship between market orientation and product adaption, a two-group comparison including means will be applied (Jöreskog and Sörbom 1989). The test starts with an assessment of the entire structural model as invariant across the groups,  $H_0 : \Sigma^{(1)} = \Sigma^{(2)}$ , with the measurement model invariant as reported in the section above. The structural parameters, B and  $\Gamma$ , are set to be invariant, and the phi-matrix,  $\Phi$ , and the diagonal psi-matrix,  $\Psi$ , are allowed to vary across groups. Furthermore, structural means,  $\alpha$  and  $\kappa$ , are estimated for the companies with overall cost

leadership strategy and fixed to zero for the companies with a differentiation strategy. Such estimation provides the possibility to control for group differences when estimating the structural parameters (Bagozzi and Yi 1989). As found in the analysis of the direct effects (cf., Table 6.6), competitive strategy affects some of the endogenous variables. This is also reflected in the measurement model for the two groups where the means of the latent variables are different for the two groups (cf. Table 6.7).

Test of the moderator hypotheses is made by testing each of the four hypothesis one at a time. The test is then the direction of the difference and the associated better fit achieved freeing a parameter. As can be seen in Table 6.8, two out of four moderator hypotheses are supported. The effect of market orientation information system on product adaption is higher for firms holding a differentiation strategy than for those holding an overall cost leadership strategy ( $P < 0.01$ ). The effect is significant and consistent with hypothesis 5A. The effect of market orientation domainwidth on product adaption is not significantly different for the two strategies and thus hypothesis 5B is rejected. Market orientation means alteration turns out to have a negative impact on product adaption for both strategies. However, the impact is less negative for firms holding a differentiation strategy, and thus, hypothesis 5C is supported ( $P < 0.001$ ). Finally, market orientation tacitness does not show any significant different effect on product adaption under the two competitive strategies, and thus, hypothesis 5D is rejected.

Additional information about the effect of the model may be obtained from an analysis of the structural means. In Table 6.7 product adaption turns out to be at a lower level for overall cost leaders than for differentiators ( $\alpha = -2.52$ ,  $P < 0.001$ ). When controlling for the effects of market orientation on product adaption in the structural model, the difference in product adaption between the two groups disappears and becomes non-significant. This indicates that the structural model has the ability to account for the observable differences between the companies that hold different competitive strategies. Additionally, the difference in sales growth from the measurement model also disappears in the structural model and becomes non-significant. The structural model is not able to account for relative price differences between the two kinds of strategies, which may indicate that product adaption is an insufficient explanation of such group difference. Profitability is different for the two groups in the measurement model, where the profitability is higher for the companies that hold a differentiation strategy. In the structural model, this difference is still present but the effect is halved, and the model is able to account for some of the difference in profitability between



differentiators and overall cost leaders. In sum, the analysis of the mean differences support the model's ability to explain differences in performance across the two groups.

**TABLE 6.8**  
**The moderating effect of market orientation on product adaption**

Parameter		Differentiat- ion Strategy Emphasis	Hypothesized Effect	Overall Cost Leadership Emphasis	Chi-square Difference <sup>a</sup>
Market Orientation Information System	$\gamma_{11}$	1.76 (0.49)	>	0.72 (0.28)	6.97*
Market Orientation Domainwidth	$\gamma_{12}$	10.96 (59.87)	>	11.49 (65.48)	0.01
Market Orientation Means Alteration	$\gamma_{13}$	-0.19 (0.09)	>	-0.93 (0.34)	10.27**
Market Orientation Tacitness	$\gamma_{14}$	0.01 (0.27)	>	-0.71 (0.43)	1.57

Note. <sup>a</sup>: The Chi-square for a model with the effects of market orientation on product adaption held equivalent across the two groups is 443.66 with 296 degrees of freedom; \* : P<0.01; \*\* : P <0.001

## 6.5 CONCLUSION

Chapter 4 presented a hypothesized model of the effects of market orientation. The model contains 13 hypotheses. Table 6.9 lists the hypotheses together with the accompanying results from the empirical study. It can be read from the table that 9 out of 13 hypotheses received support. Some comments are provided to this result.

Three of four market orientation capabilities were supported in the study. The three capabilities that were supported all show relatively high regression standardized coefficients, which means that the impact on product adaption is considerable. The only capability which did not receive support was market orientation means alteration. In fact, this effect turned out to be in the opposite direction, and 'significantly' so.

Market orientation information system and market orientation means alteration turn out to be of more importance for differentiated firms than for overall cost leaders. For market orientation domainwidth and market orientation tacitness no such differences were found.

Product adaption was argued to be an important outcome of market orientation because it is closely related to what market orientation possibly does to the firm, and because product adaption is important to the firm's market performance. The fact that explained variance in product adaption is 71 percent with control variables and 66 percent without control variables illustrates the appropriateness of product adaption as an outcome variable for market orientation. Second, product adaption is important to the firm in order to achieve sales growth and high(er) price(s) in the market, which are proposed and empirically supported in this study. Sales growth leads to profitability. Higher prices also lead to profitability. Although price has a potential negative impact on sales growth, the net impact of price on profitability is positive.

Next chapter includes a discussion of the findings and their implications. The limitations of the study are also considered.

**TABLE 6.9**  
**Summary of hypotheses test**

Hypotheses	Proposed	Found	Significance Level <sup>a</sup>	Conclusion
H1 Market Orientation Information System → Product Adaption	+	0.49 <sup>b</sup>	P<0.025	Supported
H2 Market Orientation Domainwidth → Product Adaption	+	0.38 <sup>b</sup>	P<0.05	Supported
H3 Market Orientation Means Alteration → Product Adaption	+	-0.53 <sup>b</sup>	NS	Not Supported
H4 Market Orientation Tacitness → Product Adaption	+	0.32 <sup>b</sup>	P<0.025	Supported
H5a Differentiation Strategy Emphasis moderates Market Orientation Information System → Product Adaption	+	1.04 <sup>c</sup>	P<0.01	Supported
H5b Differentiation Strategy Emphasis moderates Market Orientation Domainwidth → Product Adaption	+	- 0.53 <sup>c</sup>	NS	Not Supported
H5c Differentiation Strategy Emphasis moderates Market Orientation Means Alteration → Product Adaption	+	0.74 <sup>c</sup>	P<0.001	Supported
H5d Differentiation Strategy Emphasis moderates Market Orientation Tacitness → Product Adaption	+	0.72 <sup>c</sup>	NS	Not Supported
H6 Product Adaption → Relative Price	+	0.43 <sup>b</sup>	P<0.001	Supported
H7 Product Adaption → Sales Growth	+	0.33 <sup>b</sup>	P<0.001	Supported
H8 Sales Growth → Profitability	+	0.44 <sup>b</sup>	P<0.001	Supported
H9 Relative Price → Profitability	+	0.09 <sup>b</sup>	P<0.05	Supported
H10 Relative Price → Sales Growth	-	-0.06 <sup>b</sup>	NS	Not Supported

Note <sup>a</sup> : One-tailed test; <sup>b</sup> : Standardized regression coefficients;

<sup>c</sup> : Difference between the unstandardized paramter estimates in the two groups.

# **DISCUSSION AND IMPLICATIONS**

*Market orientation.... easy to tell but hard to practice*

The opening question of this research was: *If the central lesson of modern marketing is that market oriented companies are generally more productive than non-market oriented companies, what is the reason for the mixed support in the empirical literature?* To answer this question, this research was designed to accomplish three goals. The first goal was to revisit the market orientation construct in order to define the different facets of it. This contribution is discussed in Chapter 7.1. The second goal of the research was to develop a theory of the effects of market orientation. A discussion of the contribution of this study to accomplish the goal is made in two parts. First, the direct effects of market orientation are discussed in Chapter 7.2, and second, the indirect effects are discussed in Chapter 7.3. A third goal of the research was to investigate the differences of the effects of market orientation for firms with a differentiation strategy emphasis in contrast to those with an overall cost leadership emphasis. Chapter 7.4 addresses the contribution of this research to accomplish this goal. Finally, Chapter 7.5 discusses managerial implications and Chapter 7.6 considers limitations and future research.

## 7.1 THE FOUR FACETS OF MARKET ORIENTATION

The starting point of this research was to analyze and revisit the market orientation concept. The analysis of the market orientation construct made in Chapter 2 revealed that the different studies have used different definitions of market orientation. In the analysis of the boundaries of market orientation only one definition was able to satisfy the criteria that were used. The appropriate boundaries for market orientation were argued to be (1) a means rather than a means and an end scope, (2) located at the SBU level, (3) restricted to the domain of current and potential customers and competitors, (4) a realized rather than an intended orientation, and (5) different from the marketing concept. The definition was the one developed by Kohli and Jaworski (1990)<sup>33</sup>. The tentative state-of-the-art definition of market orientation is then the firm's organizationwide market information generation, dissemination and responsiveness. Accordingly, market orientation is the organization's system of organizationwide market learning and the exploitation of such learning in the market decisions.

Using the resource- and capability view of the firm as a theoretical departure, market orientation was reconceptualized as market orientation capabilities. It was argued that market orientation is the *firm's capability to integrate, develop, revise and use market knowledge, as the firm's competence related to market orientation, to address changes in the market*. When integrating the definition of organizational learning with the one of market orientation capabilities, market orientation learning capabilities were eventually defined as: 'An organization learns about its market orientation resources if, through the processing of market information, the range of its potential market orientation activities are changed'. Central to market orientation as learning capabilities is the ability to coordinate, develop, and exploit firm resources (e.g., the skills of organization members) so that the organization revises its market knowledge (i.e., the result of learning) and exploits such knowledge in market decisions.

The extended and new definition of market orientation requires additional capabilities than the one represented in the definition by Kohli and Jaworski. The Kohli and Jaworski definition is relabeled market orientation information system capability and is, perhaps, the core of market orientation learning capabilities because it represents the firm's ability to organize its resources used to generate, disseminate and exploit market information. As most markets are

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<sup>33</sup> Notably, no studies have yet attempted to show that this definition of market orientation does not positively entail firm performance, while the other widely used definition developed by Narver and Slater has failed in some studies (Narver, Jacobson & Slater 1993; Greenley 1995a; 1995b).

evolving the firms may benefit from a continuous revision of their market knowledge. To extend the contribution of market orientation information system in contrast to the one developed by Kohli and Jaworski (1990), the 'market orientation information system as syndrome' was suggested. The market orientation information system as syndrome was defined as a group of symptoms that together are characteristic of a specific condition. The group of symptoms are the market orientation information system dimensions (generation, dissemination, responsiveness) and the condition is market orientation information system capability. The ability to coordinate the firm resources so the organizationwide information processing activities become interrelated is crucial for the organization to effectively produce and exploit market knowledge.

Additionally, three complementary market orientation learning capabilities are developed in this research. Market orientation domainwidth is the organization's capability to produce and exploit knowledge from segments outside the firm's current principally served market segments. Such information may be useful to the firm in order to see trends, threats, and opportunities that may occur in its principally served market segments as well as in new and emerging segments. This capability is deduced from the exploration capability suggested by March (1991) and may reflect the firm's market myopia remedy.

Similarly, from the exploration approach, a market orientation means alteration capability was suggested to be important for the firm to be(come) dynamic in its market orientation practice and use of firm resources. The ability to bring together the different skills in an organization to continuously look for new ways to produce and exploit market knowledge is a means to improve the quality of the learning. Particularly, competitors will imitate (i.e., copy best practice) and duplicate (i.e., find other solutions that imitate an equal effect) firms that are successful in their market orientation. Additionally, markets evolve and new markets and different periods require other solutions. Thus, a market orientation means alteration capability may be a way to make the organization's market orientation dynamic and flexible.

To achieve a sustained competitive advantage in a market the firm is proposed to hold a tacit market orientation capability (Teece, Pisano, and Shuen 1997). Although market orientation information system has been argued to be tacit (Hunt and Morgan 1995), an organizational learning system may consist of explicit as well as tacit knowledge (Nonaka 1994). Therefore, a market orientation tacitness capability is suggested to be important to

achieve and sustain competitive advantage. A tacit market orientation capability releases energy and makes the market learning (i.e., information, generation, and responsiveness) more smooth and coordinated. Moreover, when knowledge becomes internalized (i.e., tacit) it becomes difficult for the competitors to grasp, and thus, difficult to imitate.

In this research the four constructs of market orientation learning capabilities were measured and revealed satisfactory discriminant validity as well as unidimensionality. The theoretical and empirical identification of mechanisms of the firms' market learning is a contribution to the market orientation literature where many of the processes of learning have been emphasized but not defined (see e.g., Sinkula 1994; Day 1994; Slater and Narver 1995; Jaworski and Kohli 1996). Additionally, the study is also a contribution to the resource- and capability literature where the mechanisms are either discussed as concepts or separately, and have not been brought together and defined as constructs. Needless to say, market orientation learning capabilities are only one set of capabilities of the firm, although most scholars attempt to identify capabilities that drive market innovations and superior products (Teece, Pisano, and Shuen 1997; Kogut and Zander 1992).

## 7.2 TOWARD A THEORY OF THE EFFECTS OF MARKET ORIENTATION

Previous research of market orientation have studied different accompanying consequences. Such consequences are profitability, overall firm performance, new product success, sales growth, market share, and retention (see Appendix 1). Integrating the capability- and resource view and the firm performance literature, the distinction between firm effectiveness and firm efficiency is made. Efficiency is the outcome of effectiveness, that is, the ability to meet the constraints the firm faces. Accordingly, effectiveness is seen as market performance and efficiency is seen as profitability.

The ability to produce and exploit revised and accurate market knowledge is proposed to enable the firm to perform better with respect to its market treatments. Out of the four P's the product adaption is chosen as the most central competitive parameter for the firm. Market knowledge is seen as an important cause of the ability to provide superior products that meet the preferences of the customers and are unique compared with those of competitors.

The impact of the four market orientation learning capabilities on product adaption are all expected to be positive. Three of the four hypotheses are supported in the empirical study. A summary of the findings is reported in Table 7.1.

**TABLE 7.1**  
**Hypotheses: The effects of market orientation on product adaption**

Constructs	Hypotheses	Findings	Significance level <sup>a</sup>
Market orientation information system	+	+	p<0.025
Market orientation domainwidth	+	+	p<0.05
Market orientation means alteration	+	-	NS
Market orientation tacitness	+	+	p<0.025

note. <sup>a</sup> one-tailed tests



The effect of market orientation information system on product adaptation is positive and significant. Firms that provide superior products to the market differ from those which do not with respect to the degree of the capability to produce and exploit market knowledge. It has been argued that market orientation enables the firm to provide products that are successfully adapted to the market (e.g., Narver and Slater 1990; Kohli and Jaworski 1990; Cooper 1994) but only limited support has been provided to such a proposal (for exceptions, see Slater and Narver 1994).

Market orientation domainwidth is suggested to be of value for the firm to generate new ideas not currently being found in its principally served markets. Producing and exploiting knowledge outside the firm's principally served markets may be used to improve and develop current products and provide entirely new products to the current segments. Additionally, screening other markets may also give rise to diversification in segments where the firm has matching competencies. In both cases the firm may be able to provide products that are superior to the customers and unique compared with the ones of the competitors. The results from the empirical study support the positive impact of market orientation domainwidth. This capability has never before been studied theoretically nor empirically in the market orientation literature. The idea is not new to marketing and can already be traced back to Levitt (1960). However, it contributes to the market orientation literature because the market orientation information system does not include this kind of market learning, although this has been indicated by Kohli and Jaworski (1990).

The hypothesized positive effect of market orientation means alteration on product adaptation does not receive support in the empirical study. It was argued that a firm may benefit from raising questions about current orientation practices to explore new and perhaps better ways to produce and exploit market knowledge. Such a view is widely supported in the literature (e.g., Slater and Narver 1995; Lyles and Schwenk 1992; March and Levinthal 1994; Prahalad and Hamel 1994). Lack of market orientation means alteration implies 'business as usual' and thus a static way of learning about markets. The empirical study shows that the effect on product adaptation is negative. Two *post hoc* explanations are provided to the finding. First, companies might freeze their routines of market orientation when they experience that their products perform well in the market. When the products do not perform well, firms are more likely to search for new ways of producing and exploiting market knowledge. The latter is reactive learning which means the firm changes the routines only when they receive negative

feedback from the market (Scott 1992; Starbuck 1983). It was proposed that market orientation means alteration would be a means to proactive learning. However, such learning may be difficult because organizations may be characterized by routinizing learning that has turned out to be successful in the past (Cyert and March 1963; Nelson and Winter 1982; Levinthal and March 1994). Second, the research design used is cross-sectional. This means that the effect might vanish in such design but may turn out to be true in a dynamic design (e.g., panel design). Market orientation means alteration, as an exploration learning strategy, is expected to have a positive impact in the long run and a negative impact in the short run (Levinthal and March 1994). Accordingly, the effect of market orientation means alteration is yet to be tested and further theorized.

The effect of market orientation tacitness on product adaption turns out to be positive, as hypothesized. Internalized knowledge (e.g., routines) about market orientation entails the resources to be coordinated more smoothly and is difficult or costly for competitors to imitate. The effect on product adaption has never before been explored and is a contribution to the market orientation literature because a firm has to practice market orientation before it can be fully capitalized. The finding is also a contribution to the firm capability and organizational learning literature since the effects of tacit knowledge have never been studied with respect to market performance. The empirical studies of the effects of tacit knowledge have been restricted to imitability (Zander and Kogut 1995) but a broader set of effects are suggested in the literature (e.g., Penrose 1959; Simon 1991; Kogut and Zander 1992; Nelson and Winter 1982). However, this study does not provide any test of the contribution to sustained competitive advantage. To do so, a panel design is required to see to which extent market orientation tacitness explains product adaption in the long run.

In sum, the market orientation learning capabilities account for 66 percent of the variance in product adaption. Apparently, this means that the capabilities to produce and exploit organizationwide market knowledge pay off. The findings, except for the effect of market orientation means alteration, do not contradict the suggestions found in the market orientation literature, the capability and resource-based literature, and the organizational literature. Instead, the development of the constructs and hypotheses contribute to the literature throughout integration of the various and complementary views in a theory that turns out to have a strong explanatory power for an important dependent variable, namely product adaption. Consequently, the contribution lies in the ability of this research to identify certain

market learning capabilities that are drivers of product adaption, and thus, lead to competitive advantage.

The four capabilities are believed to work together. As Nonaka (1994) points out, a firm's learning is most effective when it can manage to perform internalized and externalized routines at the same time. Internalized routines are more efficient than externalized routines but internalized routines have to be externalized to be disseminated within the organization and to become changed. Although not fully supported in this study, a firm's market orientation may benefit from being a set of tacit and explicit learning mechanisms. More research is necessary to conduct in order to explore the potential dynamics among the capabilities.

A central contribution to the literature is that this research suggests that the effect of market orientation is restricted to the performance of the market treatments, in this case, product adaption. The resource- and capability literature often views profitability as the dependent variable of firm resources and capabilities (e.g., Wernerfelt 1984; Barney 1991; Conner 1991). The current market orientation literature sees the effects to be of various kinds, including such kinds of performance as profitability and sales growth (e.g., Jaworski and Kohli 1993; Narver and Slater 1990; Narver, Slater and Jacobson 1993; Slater and Narver 1994). This study does not find additional effects of the four market orientation capabilities beyond product adaption. In the modification indices, no significant paths are found from market orientation to the other kinds of performance included in the model. Consequently, the logic of the theory presented in this research is supported, that is, market orientation facilitates the performance of the market treatments, which in turn, are rewarded by the market and eventually entail profitability. The indirect effects are discussed in the next sections.

### 7.3 THE INDIRECT EFFECTS OF MARKET ORIENTATION

If market orientation is to be of value to the firm it has to cause more than successfully market adapted products. The effects of product adaption is suggested to be sales growth and relative price (i.e., price premium).

The impact of product adaption on relative price is believed to be positive. The better the products satisfy the needs of the customers the more are they willing to pay for the product(s). The value of a product that fits the needs of the customers and is unique compared to competitors (i.e., no close substitutes) lies in the ability to achieve a higher relative price in the market. The empirical study supports such hypothesis and the finding is reported in Table 7.2

**TABLE 7.2**  
**Hypothesis: The effects on relative price**

Construct	Hypothesis	Finding	Significance level <sup>a</sup>
Product adaption	+	+	p<0.001

note. <sup>a</sup> one-tailed tests

Similar to the effect product adaption has on price, it is proposed also to boost the sales of a firm. If the firm's products become better, more customers are likely to be willing to buy them, and vice versa. The customer chooses among the products available in the market and chooses the product that satisfies their needs better than the alternatives, all other things held constant. Accordingly, the customers will leave providers of inferior products (i.e., sales decline) and change to providers of superior products (i.e., sales growth). Such an effect is found to be positive and significant in the study, and is reported in Table 7.3.

Additionally, if better products result in higher prices the downside may be a loss in sales. This is known in the literature as the economics of price sensitivity. Although price sensitivity or price elasticity is difficult to generalize with respect to strength, the impact of relative price on sales growth, when controlling for product adaption is expected to be negative. However, the negative effect that is hypothesized in this research does not get support in the empirical study. The effect is zero, and reported in Table 7.3. Some post hoc

explanations may be provided. First, some companies do not raise the price even if they can do so, leading the firms to charge the same price for products of different quality. This can be simple mis-management, or more likely, that some companies are not willing to realize a price premium because they may fear that it will hurt the sales growth which might be more important to some firms (Nagle and Holden 1995). Second, some customers are not very price conscious, which is the case when the price is paid by a third party. In the empirical setting hotels are used as a unit of analysis. For many users of hotels the employer pays for the employee (e.g., sales person, manager) and thus the customers may have few incentives for selecting the less expensive hotel of similar standard. Third, price can sometimes be used as a quality cue. As such, if the hotel prices its products according to the level of product adaption, a high price may signal quality, and thus, causes higher sales. In contrast, a lower price for the same level of product adaption as in the former case might signal that the hotel is of a lower standard than apparently is the case and some customers do not choose it. Although the hypothesis does not receive support, perhaps because of the three post hoc explanations, the value of market orientation as drivers of product adaption increases. If a superior product entails a higher price and a higher price does not hurt the sales, the value of product adaption is increased.

**TABLE 7.3**  
**Hypotheses: The effects on sales growth**

Constructs	Hypotheses	Findings	Significance level <sup>a</sup>
Product adaption	+	+	p<0.001
Relative price	-	0	NS

note. <sup>a</sup> one-tailed tests

Sales growth and relative price are important because they are assumed to affect profitability of the firm. Sales growth facilitates better economies of scale, e.g., fixed costs can be divided among more customers. Relative price affects the profitability directly through the generation of more revenues. The two hypotheses are supported and reported in Table 7.4.

**TABLE 7.4**  
**Hypotheses: The effects on profitability**

Constructs	Hypotheses	Findings	Significance level <sup>a</sup>
Sales growth	+	+	p<0.001
Relative price	+	+	p<0.05

note. <sup>a</sup> one-tailed tests

No additional effects among the different kinds of performance are found in the data (cf., the modification indices of the model). Consequently, this is a support for the logic of the performance part of the theory of the effects of market orientation. It was suggested that the performance of market treatments (here: product adaption) leads to a reward from the market. The reward implies that the customers are willing to pay a higher price and that more customers are willing to use the product more times. In turn, market reward leads to firm efficiency, which is represented by profitability. Although the effects of market orientation on profitability is weakened through the mediated effects, the ultimate effect of market orientation on profitability is substantial. Needless to say, sales growth, relative price, and profitability are affected by factors beyond market orientation. The fact that the structure of the model holds and that the indirect effects are positive and significant are strong support for both the theory and model.

## 7.4 THE MODERATING ROLE OF BUSINESS STRATEGY

Although the proposed theory of the effects of market orientation holds for firms in general, a goal of this research was to explore to which extent market orientation was more valuable under some business strategies than others. Such differences in the effects have been proposed by Narver and Slater (1990) and Pelham (1993). The only empirical study is conducted by Pelham who found that market orientation had a stronger effect for firms holding a differentiation strategy compared to firms that hold an overall cost leadership strategy.

It is argued that firms with different business strategies have to rely on different capabilities to exploit the strategic choice they have made (Porter 1980). Different capabilities and resources are of different value for firms with different business strategies. A firm with a differentiation strategy is likely to benefit from market orientation learning capabilities to achieve a superior product advantage in the market. In contrast, an overall cost leader strategy holds other capabilities to be of equal or higher value. Such capabilities may be logistics, economies of scale, cost management, etc. However, products of cost leaders also have to match the needs of the customers and to be unique compared to competitors. Consequently, the hypotheses of this research are limited to the effects of the four market orientation capabilities on product adaption being higher (i.e., more positive) for firms with an emphasis on differentiation strategy than for those firms that hold an overall cost leadership.

Two of the four moderating effects are positive and supported in the study. Market orientation information system and market orientation means alteration turn out to be significantly more positive for firms that hold a differentiation strategy than for the firms that hold an overall cost leadership. The two other market orientation learning capabilities (i.e., market orientation domainwidth and market orientation tacitness) do not represent different effects for the two groups of firms. The results are reported in Table 7.5.

**TABLE 7.5**  
**Hypotheses: The moderating effects on**  
**the market orientation - product adaption relationship**

Constructs	Hypotheses	Findings	Significance level <sup>a</sup>
H5a Differentiation Strategy Emphasis moderates Market Orientation Information System → Product Adaption	+	+	P<0.01
H5b Differentiation Strategy Emphasis moderates Market Orientation Domainwidth → Product Adaption	+	0	NS
H5c Differentiation Strategy Emphasis moderates Market Orientation Means Alteration → Product Adaption	+	+	P<0.001
H5d Differentiation Strategy Emphasis moderates Market Orientation Tacitness → Product Adaption	+	0	NS

note. <sup>a</sup> One-tailed tests; <sup>b</sup> Difference between the parameter estimates in the two groups.

The only post hoc explanations that will be provided here is that overall cost leaders as well as differentiated firms may benefit equally from market orientation domainwidth and market orientation tacitness. Market orientation tacitness releases energy in market orientation, and thus, may be of value for cost leaders since the capability contributes to fewer resources being used in the knowledge creation and exploitation process. Accordingly, the two more comprehensive and costly capabilities, market orientation information system and market orientation means alteration, are more important for differentiators. Market orientation domainwidth might be important to cost leaders for different reasons than for differentiators. For example, one benefit of a broad domain of market orientation is that it helps the firm to simple imitations of successful marketing in other markets, while a differentiator may use market orientation domainwidth to generate additional input in its own product development process.

Does business strategy moderate the effects of market orientation? From the discussion above the answer is not obvious. Additional information about the effect of the model may be obtained from an analysis of the structural means. In Table 6.7 product adaption appears at a



lower level for overall cost leaders than for differentiators ( $\alpha = -2.52, P < 0.001$ ). Such effect is expected since overall cost leaders compete on costs (i.e., price) while differentiators compete on product superiority. When controlling for the effects of market orientation on product adaption in the structural model, the difference in product adaption between the two groups disappears and becomes non-significant. This indicates that the structural model has the ability to account for the observable differences between the companies that hold different competitive strategies. Consequently, the conclusion is that business strategy indeed moderates the effects of market orientation on product adaption, but does so only for the market orientation information system and market orientation means alteration capabilities. Not so for the two other market orientation capabilities. However, since market orientation accounts for the difference in product adaption for the two groups business strategy plays an important role as moderator.

## 7.5 MANAGERIAL IMPLICATIONS

Most managers will find profitability, sales growth, relative price (i.e., price premium), and product adaptation as relevant and important performance indicators. This research shows that product adaptation is a key to profitability through sales growth and relative price. Since 71 percent of the variance in product adaptation can be explained by the drivers in the model, market orientation learning capabilities are important for firms to focus on.

Market orientation learning capabilities are means to organizationwide market knowledge production and utilization. The amount and accuracy of relevant market knowledge enable the firm to deliver a product or products that are adapted to the market(s). However, most firms have capabilities that produce and exploit market knowledge, and thus, the competitive advantage is in the ability to develop and manage the market orientation learning capabilities better than the competitors do. The firm's ability to produce and exploit market knowledge better than competitors is a success factor according to the findings in this research. Managers have to be aware of the importance of producing market knowledge that is useful for product adaptation and which is rare among competitors. In other words, the secret of business is to know something useful about the market that nobody else knows. Additionally, the mechanisms that produce and exploit market knowledge benefit from being tacit, and thus, difficult to imitate, to contribute to a sustained competitive advantage. Accordingly, product adaptation starts with organizing the firm's production and utilization of market knowledge.

Three of four market orientation learning capabilities turn out to be significant drivers of product adaptation. The market orientation information system holds that market information is most effectively generated from new and current customers and competitors through different modes and through the use of employees from most of the firm's functional areas. For the information to become organizationwide it has to be disseminated and shared through formal and informal modes. Eventually, information about markets is utilized in the decisions relevant to production and delivery of the firm's market offering. Through the process of generation, dissemination, and responsiveness, the organization most likely discovers information redundancy as well as deficiency. Accordingly, it seems to be important for the firm to continuously assess the use of its market orientation resources (e.g., employees, customer files) to match the processes of information generation, dissemination and utilization.

Market orientation tacitness means that the organization's production and utilization of

market knowledge is embedded or internalized in the firm and its members. Tacit routines make market orientation more smooth and difficult to imitate for the competitors. Such routines result from well-practiced skills and cross-functional interactions and take time to establish. It is expected that a low or modest turnover among the employees is one important factor that facilitate the encouragement of tacit knowledge (Simon 1991; March 1991).

Market orientation domainwidth facilitates product adaption through the broad information foundation that stems from analysis of customers and competitors outside the firm's current market(s). New ideas and threats may be discovered and can be used to improve the performance of product offering in current markets as well as for diversification. Market orientation domainwidth prevents the firm from market myopia and serves as an exploration learning strategy for the firm.

In general, the three learning capabilities are important for both cost leaders and differentiators, and thus, market orientation learning capabilities are robust across different business strategies. However, the impact of market orientation information system on product adaption is found to be more important for differentiators than for cost leaders, indicating that firms that hold a differentiation strategy have to pay careful attention to the development of market orientation learning capabilities.

The fourth market orientation learning capability, market orientation means alteration, does not turn out to be of positive value for product adaption. In fact, market orientation means alteration has a negative impact on product adaption, although this effect is zero for firms with a differentiation strategy. Accordingly, it is not possible to provide sharp and clear implications for firms regarding how much effort they should spend on discussions, change, and reconsiderations for the firm's current and future use of market orientation resources and conduction of market orientation activities.

## **7.6 LIMITATIONS AND FUTURE RESEARCH**

Limitations and future research are considered collectively because the limitations of any study may be the most efficient method for identifying future opportunities for research. The chapter starts out with a consideration of the theoretical perspectives (Chapter 7.6.1) and continues with research design (Chapter 7.6.2), data collection (Chapter 7.6.3), and concludes with measurement (Chapter 7.6.4).

### **7.6.1 Theoretical perspectives**

The main focus of this research has been on the direct effects of four market orientation learning capabilities on product adaption. As argued in Chapter 4.2 product adaption is an important market treatment performance indicant for the firm, and perhaps the most important one. Moreover, it was argued that product adaption might be seen as the core of the firm's market offering. The empirical results turn out to support the choice of product adaption in two ways. First, 71 percent of the variance in product adaption was explained by the model, and thus, product adaption is an adequate dependent variable. Second, the absence of direct effects (cf., modification indices of the model) of market orientation on price, sales growth and profitability may indicate that market orientation learning capabilities work through product adaption, at least for the dependent latent variables included in the model. As such, the restricted network of effects of market orientation seems to hold. However, it is unlikely that market orientation may affect product adaption but not the performance of market communication, distribution activities, and pricing. To fully explore the effects of market orientation learning capabilities other kinds of market treatment performance may be included to get insight into what the organization gains from being or becoming market oriented. Particularly, in some industries and under some environmental conditions the other market treatments might become crucial in line with product adaption.

Furthermore, the set of market reward variables in this study is limited to sales growth and relative price. Many other market reward variables are of interest to include in the theory of the effects of market orientation. For example, customer loyalty (Zeithaml, Berry, and

Parasuraman 1996), brand value (Keller 1993) and market power (Porter 1980) may be of relevance to include in further studies of the direct and indirect effects of market orientation.

It is argued in Chapter 4.2 that product adaption is the outcome of product innovation. Accordingly, this study implies that the firm's product innovation performance is a function of the four market orientation learning capabilities. Since the ability to innovate and provide new and successful products is important to firms (Urban and Hauser 1993), the effects of market orientation learning capabilities on product innovation are of interest to further explore (cf., Cooper 1994; Narver and Slater 1994; Atuahene-Gima 1995).

The market orientation information system capability turned out, empirically, to be the most important cause of product adaption. Accordingly, the firm may benefit from generating market information, disseminating it, and eventually using it. Although not a goal of this research, a more thorough insight into the three dimensions of market orientation information system is needed to identify what kinds of information are crucial (and trivial) to gather, the effectiveness of different modes of dissemination and information use, etc.

In order to contribute to further progress in the field of market orientation learning capabilities the discussion above reveals some areas of extension and refinement. Additionally, antecedents of market orientation learning capabilities may be of importance to get knowledge about why firms differ with respect to market orientation.

## **7.6.2 Research design**

The data of this research are based on a cross-sectional design. Although the hypotheses are argued to be of causal nature the design used is not suitable to test the direction of influence in the model. However, two of three criteria for testing causality (i.e., isolation and covariation) are accomplished by the design. The direction of influence is argued to be the criterion of least importance in theory development because isolation and covariation have to be established before direction of influence is relevant to study. Moreover, the literature does not question the direction of influence, and thus, such a criterion is less important to give priority to in the choice of research design. However, the lack of support for the hypothesized effect of market orientation means alteration on product adaption may be caused by an

inappropriate design. In Chapter 7.2 it was argued that when the firm experiences product adaption success, it is likely to freeze its current market orientation practice. Similarly, when the firm experiences product adaption problems it is more likely to look for new ways to use market orientation resources and to conduct market orientation activities. However, the organizational learning literature (e.g., Levinthal and March 1994) holds that the firm may benefit from exploration learning strategies, such as market orientation means alteration, in the long run and not necessarily in the short run. Thus, the use of cross-sectional design is of limited value to test the potentially lagged effect of market orientation means alteration and a panel design is needed for further exploration in order to consider to which extent the impact on product adaption is positive, negative or absent. Similarly, to contribute to further progress on the development and test of a theory of the effects of market orientation, the use of a panel design is required.

The study was conducted in the hotel industry. The choice of one single industry ruled out some possible external influences. Replications are necessary to tell if the findings from this study also hold as a general theory across industries. Similarly, more studies have to be conducted to assess to which extent the findings in this research are non-spurious through inclusion of relevant control variables beyond those applied in this study.

### **7.6.3 Data collection**

Data is collected from key-informants of the firms represented in the sample. The managers of the firms that participated in the survey served as key-informants. They are viewed as being the best key-informants because of their superior access to information about most aspects of a firm's activities. Needless to say, key-informant data do not give the best representation of organizational traits such as market orientation and business strategy nor market performance. Although the test of key-informant bias showed a modest but acceptable fit between the managers' perception of customer satisfaction and the customers' own assessment of customer satisfaction, the test also demonstrated a potential for a stronger test through the use of multiple informants for the constructs in the model.

Data for market orientation learning capabilities may benefit from sources in addition to

the business manager. The middle manager and other employees may have better insight into some aspects of the four capabilities, and thus, may contribute to more accurate information about the constructs. Similarly, the product adaption may be more accurately measured by using customers who may be in a better position to assess the product's usefulness and uniqueness. Finally, data regarding sales growth and profitability may be possible to acquire from annual accounts.

It is uncertain to which extent the use of key-informants may cause biased or/and unreliable information for the test of the model of this study. However, to further test the model supported in this study multiple sources of information for the variables are needed.

#### **7.6.4 Measurement**

Except from the measures of market orientation information system, the other measures are new or have not been validated using confirmatory factor analysis. New measures are developed for (1) market orientation means alteration, (2) market orientation domainwidth, and (3) relative price. Established measures, where validity is not reported in the previous studies, are used for (1) market orientation tacitness, (2) differentiation strategy, (3) overall cost leadership, and (4) product adaption. As a result, some of the constructs are measured by the use of measures with low reliability. On the other hand, the measures are found to hold a satisfactory face validity, fit well in a confirmatory measurement model, and to behave well in a structural analysis. However, further research may be needed to add and revise items for the constructs mentioned above in order to provide measures that are more reliable in addition to further testing and developing the construct validity.

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## APPENDIX 1: EMPIRICAL STUDIES OF THE EFFECTS OF MARKET ORIENTATION

There has been a considerable research on the effects of market orientation since 1990. The purpose of this chapter is to review this research in order to explore and assess the effects that are proposed and analyzed in previous studies. The review is limited to the external effects of market orientation (see Chapter 4). The studies included in this review are those published in internationally distributed journals, research papers published through the Marketing Science Institute, and doctoral theses reported in the University Microfilms International Dissertation Services. Accordingly, the selection process is considered to include the most influential contributions.

Author(s)	Theoretical prediction	Empirical support	Method and sample
Narver and Slater (1990)	Market Orientation --(+)--> Return on Assets (ROA) Square of Market Orientation (MO) --(+)--> ROA	Partial Support Partial Support  Significant= $p < .05$	N=110 (for a response rate of 84 percent) SBUs of a forest products corporation. The SBUs cover commodity businesses, specialty products businesses and distribution businesses.  It was used multiple members of the top management team within each SBU.  Design: Cross-sectional.
Narver, Jacobson and Slater (1993)	Market Orientation --(+)--> Relative sales growth Market Orientation --(+)--> Relative ROI	Significant Ns.  Significant= $p < .05$	N=35 SBUs in a forest products company.  It was used multiple members of the top management team within each SBU.  Design: Panel (for the years 1987 and 1991).

<p><b>Jaworski and Kohli (1993)</b></p>	<p>MO --(+)--&gt; Business Performance</p>	<p>Significant</p> <p>Significant=<math>p &lt; .05</math></p>	<p>The sample #1 was drawn from the Marketing Science Institute and the top companies listed in the Dun and Bradstreet Million Dollar Directory. The sample #2 was drawn from the member list of American Marketing Association. The sample #1 contain N=222 (for a response rate of 79 percent) business units (SBUs), and sample #2 contain N=230 (for a response rate of 47 percent) SBUs.</p> <p>The samples were reached by questionnaire. For each business unit it was two key informants, one marketer and one non-marketer. The key informants were part of the top management.</p> <p>Design: Cross-sectional.</p>
<p><b>Deshpandé, Farley and Webster (1993)</b></p>	<p>Customer orient., self-reported --(+)--&gt; Bus. Perf. Customer orient., reported by customer --(+)--&gt; BP</p>	<p>Ns.</p> <p>Significant</p> <p>Significant=<math>p &lt; .05</math></p>	<p>N=50 (for a response rate of 82 percent) Japanese firms. Two marketing executives in a single SBU of each firm were interviewed. In addition, two purchasing executives at a chosen customer firm were also interview. Hence, the analysis is based on 50 sets of four interviews per set (i.e. 50 quadrads).</p> <p>Design: Cross-sectional.</p>
<p><b>Ruekert (1992)</b></p>	<p>MO --(+)--&gt; Long run financial performance</p>	<p>Significant</p> <p>Significant=<math>p &lt; .001</math></p>	<p>N=3500 (for a response rate of 70 percent) managers from five SBUs, or divisions, of a large US. firm. The study reports the results of a randomly generated sample of 400 completed surveys. Reported results from another sample of 400 respondents verified the results reported in the article.</p> <p>Design: Cross-sectional.</p>

<p><b>Pelham (1993)</b></p>	<p>Market orientation --(&gt;0&lt;)--&gt; Mkt/sales effectivin. Mkt/sales effectiveness is a mediating variable in: MO ----&gt; Profitability Market orientation --(&gt;0&lt;)--&gt; Growth/Share</p> <p><b>Moderating hypotheses:</b> Industries associated with differentiation in customers and products --(+)--&gt; relationship between MO and mkt/sales effectiveness</p> <p>Industries associated with Market &amp; Technical turbulence --(+)--&gt; relationship between MO and marketing/sales effectiveness</p> <p>Industries associated with competitive intensity --(+)--&gt; relationship between MO and marketing/ sales effectiveness</p>	<p>Significant</p> <p>Significant Ns.</p> <p>Significant</p> <p>Ns.</p> <p>Ns.</p> <p>Significant=<math>p&lt;.05</math></p>	<p>N=160 (for a response rate of 6.7 percent), a stratified sample of industrial (business-to-business) firms (annual sales between \$20 and 200 million). The commodity products industries selected were plastics, fabricated and basic metals, packaging, and chemicals. The specialty product industries selected were instruments, machinery, and electronic equipment.</p> <p>Each firm was represented by two key- informants; the president and sales manager.</p> <p>Analysis: LISREL</p> <p>Design: Cross-sectional.</p>
<p><b>Wood and Bhulan (1993); Bhulan (1992)</b></p>	<p>Market Orientation (MO) --(+)--&gt; Performance</p>	<p>Significant (both)</p> <p>Significant=<math>p&lt;.05</math></p>	<p>N=238 Not-for-profit hospitals, for a response rate of 24 percent. One key informant, representing administration and senior management team, was selected for each of the hospitals.</p> <p>Design: Cross-sectional.</p> <p>The model was tested independently in two different market environments, patient and donor markets.</p>
<p><b>Pleshko (1993)</b></p>	<p>Market Orientation --(+)--&gt; Business Performance</p> <p><b>Moderators of the relationship between market orientation and business performance:</b> Environmental degree of Dynamism (+) Environmental degree of Heterogeneity (+) Environmental degree of Complexity (+)</p>	<p>Significant</p> <p>Ns.</p> <p>Ns.</p> <p>Ns.</p> <p>Significant=<math>p&lt;.05</math></p>	<p>N=141 (for a response rate of 12 percent) public and private firms within both consumer goods and industrial goods industries.</p> <p>The key informant for each firm was the CEO or other executive-level employees.</p> <p>Design: Cross-sectional.</p>

<b>Balakrishnan (1992)</b>	<p>Degree of market, research &amp; manufacturing orientation --(+)--&gt; Business Performance (BP)</p> <p><b>Moderators of the relationship between the effects of market orientation on BP:</b> Technological turbulence (-)</p>	<p>Significant</p> <p>Ns.</p> <p>Significant=<math>p &lt; .05</math></p>	<p>N=139 (for a response rate of 46 percent) manufacturers of machine tools/manufacturing machinery.</p> <p>A senior executive was the key informant of each firm.</p> <p>Design: Cross-sectional (survey).</p>
<b>Davis (1993)</b>	<p>Marketing orientation --(+)--&gt; Performance</p> <p>Marketing orientation --(+)--&gt; Number of innovations</p> <p>Marketing orientation --(-)--&gt; Number of break-through innovations</p>	<p>Significant</p> <p>Not significant</p> <p>Contradictory support (significant)</p>	<p>N=107 (for a response rate of 54 percent) biotechnology companies in the US.</p> <p>The key informant was the biotechnology marketing executive.</p> <p>Design: Cross-sectional (survey).</p>
<b>Greenley (1995a)</b>	<p>Market orientation --(+)--&gt; Company Performance:</p> <p>Return on Investments (ROI)</p> <p>New Product Success</p> <p>Sales Growth</p>	<p>Not significant</p> <p>Not significant</p> <p>Not significant</p>	<p>N=240 (for a response rate of 24 percent)</p> <p>UK companies with more than 5000 employees.</p> <p>The key informant of the firm differ across the firms, but the key informants had all a manager position.</p> <p>Design: Cross-sectional (survey).</p>
<b>Greenley (1995b)</b>	<p>No hypotheses provided.</p>	<p>Exploratory data analysis provided indications for that comprehensive market orientation has positive effects on ROI, new product success, and sales growth.</p>	<p>See Greenley (1995a)</p>
<b>Selnes, Jaworski and Kohli (1998)</b>	<p>Market orientation --(+)--&gt; Performance</p>	<p>Significant</p>	<p>N=237 (for a response rate of 81 percent)</p> <p>SBU's of Scandinavian companies.</p> <p>Design: see Jaworski and Kohli 1993</p>

Slater and Narver (1994)	<p><b>Moderators on the effect of market orientation on business performance (ROA, Sales Growth (SG), New Product Success(NPS):</b></p> <p>Extent of Market turbulence (+)</p> <p>Extent of Technological turbulence (-)</p> <p>Extent of Competitive hostility (+)</p> <p>Rate of Market growth (-)</p> <p><b>Moderators of relative emphasis in a market orientation: the relationship between customer emphasis and performance:</b></p> <p>Rate of Market Growth (+)</p> <p>Extent of buyer power (-)</p> <p>Degree of competitor concentration (-)</p> <p>Degree of competitor hostility (+)</p>	<p>Contradictory effect on ROA, else ns.</p> <p>Significant for NPS, else ns.</p> <p>Ns.</p> <p>Significant for SG, else ns.</p> <p>Ns.</p> <p>Contradictory effects on SG and NPS, else ns.</p> <p>Significant for ROA, else ns.</p> <p>Ns.</p> <p>Significant=<math>p&lt;.05</math>.</p>	<p>N=107 SBUs (for a response rate of ca. 80 percent) from a forest products company (ca. 76 valid units) and a diversified manufacturing corporation (ca. 31 valid units).</p> <p>It was used multiple members of the top management team within each SBU.</p> <p>Design: Cross-sectional.</p> <p>The moderator effects were examined through regressions with interactions effects. Non of these were significant. Although, partial correlation coefficients were examine for differences across high and low (sub-) groups for each of the moderator variables - the significant results of this analysis are reported in this review.</p>
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## APPENDIX 2: ITEM LIST USED FOR DATA COLLECTION

### **Market Orientation Information System**

(adapted from Jaworski and Kohli 1993)

#### **Information Generation**

- A1.1 In this hotel, we meet with the most important customers at least once a year to find out what products and services they will need in the future.
- A1.2 Individuals from other departments than sales and marketing interact directly with customers to learn how to serve them better.
- A1.3 In this hotel, we do a lot of in-house market research.
- A1.4 We are fast to detect changes in our customers' product preferences regarding the hotel product.
- A1.5 We poll end users at least once a year to assess the quality of our products and services.
- A1.6 We often talk with those who can influence our end users' purchases (e.g., travel agencies, travel secretaries)
- A1.7 We collect industry information through informal means (e.g., lunch with industry friends, suppliers, etc.)
- A1.8 In our hotel, intelligence on our competitors is generated independently by several departments.
- A1.9<sup>a</sup> We are slow to detect fundamental shifts in the hotel industry, e.g., new competitors, new technology, regulation.
- A1.10 We periodically review the likely effect of changes in our business environment (e.g., VAT, new alliances, new patterns of travel) on customers.

#### **Information Dissemination**

- A1.11 A lot of informal 'hall talk' in this hotel concerns our competitors' tactics or strategies.
- A1.12 We have interdepartmental meetings at least once a quarter to discuss market trends and developments.
- A1.13 Marketing personnel in our hotel spend time discussing customers' future needs with other functional departments.
- A1.14 Our hotel periodically circulates documents (e.g., reports, analyses) that provide information on our customers.
- A1.15 When something important happens to a major customer or market, the whole hotel knows it in a short period.
- A1.16 Data on customer satisfaction are disseminated at all levels in the hotel on a regular basis.
- A1.17<sup>a</sup> There is minimal communication between marketing and the other departments.
- A1.18<sup>a</sup> When one department finds out something important about competitors, it is slow to alert other departments.

### **Information responsiveness**

- A2.1<sup>a</sup> It takes us forever to decide how to respond to our competitors' price changes.
- A2.2 Principles of market segmentation drive new product and service development efforts in this hotel.
- A2.3<sup>a</sup> For one reason or another we tend to ignore changes in our customers' product and service needs.
- A2.4 We periodically review our product and service development efforts to ensure that they are in line with what customers want.
- A2.5<sup>a</sup> Our business plans are driven more by resource advances than by market research.
- A2.6 Several departments get together periodically to plan a response to changes taking place in our business environment.
- A2.7<sup>a</sup> The products and services we sell depend more on internal politics than real market needs.
- A2.8 If a major competitor were to launch an intensive campaign targeted at our customers, we would implement a response immediately.
- A2.9 The activities of the different departments and functions in this hotel are well coordinated.
- A2.10<sup>a</sup> We have no formal routines for handling of complaints.
- A2.11<sup>a</sup> Even if we came up with a great marketing plan, we probably would not be able to implement it in a timely fashion.
- A2.12 We are quick to respond to changes in our competitors' product offerings.
- A2.13 When we find out that customers are unhappy with the quality of our service, we take corrective action immediately.
- A2.14 When we find that customers would like us to modify a product or service, the departments involved make concerted efforts to do so.

### **Market Orientation Means Alteration**

(adapted from Lyles and Schwenk 1992)

- A3.1 The people in the hotel frequently discuss how the hotel may discover the customers' needs and demand.
- A3.2 The people in the hotel have many different opinions about how information about competitors may be acquired.
- A3.3 There are many different opinions in the hotel about how we may be better able to meet the competition from the other hotels.
- A3.4 It is a great amount of disagreement in the management team about what kind of information we need to make market decisions.
- A3.5 Some of the employees frequently raise questions about the managers' interpretation of the market.

**Market Orientation Domainwidth**  
(new)

- A3.6 We collect much information about customer groups not currently being served by us.
- A3.7 Compared to our competitors, we have much more knowledge about new trends in the hotel industry.
- A3.8<sup>a</sup> We concentrate all attention toward current customers and competitors.
- A3.9 Compared to our most important competitors, we are much more concerned discovering new customer segments.
- A3.10 Compared to the competitors, we are much more concerned about what competitors in other markets do.

**Market Orientation Tacitness**  
(adapted from Zander and Kogut 1995)

- A3.11<sup>a</sup> A useful manual describing our market information generation, dissemination, and responsiveness can be written.
- A3.12<sup>a</sup> It is possible for anyone in our management team to know everything about what the hotel does to gather, disseminate and respond to market information.
- A3.13 To get a good understanding of the hotel's customers and competitors it is very important that our employees have long experience from the hotel.
- A3.14 It is important that the employees are in constant contact with people from other departments to get a good understanding of the market.
- A3.15<sup>a</sup> A competitor can easily learn how we gather market information, disseminate the information in the hotel, and how the information is being used in decisions.

**Product Adaption**  
(adapted from Cooper 1994)

- A5.1 The customers perceive the hotel's product to contain many unique attributes and characteristics for the customer which are not available from competitive products.
- A5.2 The hotel offers a product which represents good value for money for the customer.
- A5.3 The hotel's product offering is superior to competing products in terms of meeting customer needs.
- A5.4 In terms of how the customers measure quality, the hotel delivers excellent product quality relative to competitors' products.
- A5.5 The hotel's product offering has superior price/performance characteristics for the customers relative to competitors' products.
- A5.6 The hotel's product benefits are easily perceived as being useful by the customer.
- A5.7 The benefits of the hotel's product offering are very visible and obvious to the customer.



**Competitive Strategy**  
(adapted from Nayyar 1993)

**Differentiation Strategy**

- A4.1 Compared to the average within the industry, our competitive advantage is based on that we will be more flexible with respect to providing the customers customized solutions.
- A4.2 Compared to the average within the industry, our competitive advantage is based on a better reputation.
- A4.3 Compared to the average within the industry, our competitive advantage is based on that we will be more adapted to meeting customers' needs and demand.
- A4.4 Compared to the average within the industry, our competitive advantage is based on that we will have a more comprehensive customer service.

**Overall Cost Leadership**

- A4.6 Compared to the average within the industry, our competitive advantage is based on that we will have lower costs per customer.
- A4.7 Compared to the average within the industry, our competitive advantage is based on that we will have better cost control.

**Relative Price**  
(new)

- A4.5<sup>a</sup> Compared to the average within the industry, our competitive advantage is based on that we will charge lower prices.

**Profitability**  
(adapted from Narver, Jacobson, and Slater 1993)

- A6 Compared to your most important competitors, did your hotel in 1996 have a poorer profitability, slightly poorer profitability, approximately the same profitability, slightly greater profitability, or greater profitability?

**Sales Growth**  
(adapted from Narver, Jacobson, and Slater 1993)

- A7 Compared to your most important competitors, did your hotel in 1996 have a lower sales growth, slightly lower sales growth, equal sales growth, slightly greater sales growth, or greater sales growth?

Note. <sup>a</sup> : reversed

### APPENDIX 3: DESCRIPTIVE STATISTICS

The descriptive statistics are reported for the measures used in the data collection. Additionally, the parcels for market orientation information system are reported, based on the parceling procedure discussed in Chapter 6.2 and Appendix 4.

	Mean	Std. Dev.	Kurtosis	Skewness	N
<b>Market Orientation Information System</b>					
<b>Information generation</b>					
A1.1	3.43	1.50	-1.20	-0.50	366
A1.2	3.93	1.25	0.27	-1.14	367
A1.3	3.53	1.47	-1.01	-0.64	367
A1.4	3.59	1.02	0.12	-0.60	369
A1.5	3.34	1.56	-1.45	-0.33	367
A1.6	3.79	1.27	-0.38	-0.84	371
A1.7	3.85	1.19	0.02	-0.93	371
A1.8	3.21	1.45	-1.27	-0.32	367
A1.9 <sup>a</sup>	4.34	0.72	-0.86	-0.61	367
A1.10	3.94	1.07	0.72	-1.07	365
<b>Information dissemination</b>					
A1.11	3.35	1.32	-0.94	-0.42	363
A1.12	3.75	1.39	-0.70	-0.80	366
A1.13	3.15	1.32	-1.04	-0.31	364
A1.14	2.79	1.52	-1.48	0.12	365
A1.15	3.62	1.36	-0.81	-0.66	369
A1.16	4.18	1.16	1.40	-1.50	370
A1.17 <sup>a</sup>	4.55	0.64	0.15	-1.14	363
A1.18 <sup>a</sup>	4.28	0.77	-1.14	-0.54	361
<b>Information responsiveness</b>					
A2.1 <sup>a</sup>	4.36	0.75	-0.91	-0.69	369
A2.2	3.64	1.14	-0.20	-0.67	366
A2.3 <sup>a</sup>	4.18	0.73	-1.09	-0.29	367
A2.4	4.15	1.00	1.54	-1.34	370
A2.5	4.17	0.74	-1.15	-0.29	370
A2.6	4.32	1.02	2.59	-1.73	364
A2.7 <sup>a</sup>	4.26	0.76	-1.13	-0.48	369
A2.8	3.85	1.27	-0.33	-0.89	365
A2.9	3.73	1.09	0.04	-0.77	365
A2.10 <sup>a</sup>	4.63	0.60	0.85	-1.38	369
A2.11 <sup>a</sup>	4.33	0.70	-0.82	-0.55	365
A2.12	3.51	1.17	-0.67	-0.44	371
A2.13	4.83	0.49	19.34	-3.88	372
A2.14	4.37	0.78	1.24	-1.20	368
<b>The market orientation system parcels</b>					
Generation	3.72	0.71	-0.25	-0.46	341
Dissemination	3.72	0.64	-0.18	-0.32	341
Responsiveness	3.98	0.50	-0.38	-0.30	339

	Mean	Std. Dev.	Kurtosis	Skewness	N
<b>Market orientation means alteration</b>					
A3.1	3.05	1.34	-1.18	-0.14	361
A3.2	3.22	1.29	-0.91	-0.31	355
A3.3	3.69	1.15	-0.02	-0.86	363
A3.4	1.94	1.20	-0.05	1.07	364
A3.5	2.33	1.28	-0.99	0.50	359
<b>Market orientation domainwidth</b>					
A3.6	2.71	1.45	-1.37	0.22	368
A3.7	2.87	1.16	-0.71	-0.11	362
A3.8 <sup>a</sup>	4.25	0.66	-0.75	-0.32	369
A3.9	3.10	1.12	-0.64	-0.20	358
A3.10	2.77	1.16	-0.84	-0.10	351
<b>Market orientation tacitness</b>					
A3.11 <sup>a</sup>	4.08	0.76	-1.27	-0.14	365
A3.12 <sup>a</sup>	4.32	0.67	-0.78	-0.48	365
A3.13	3.19	1.34	-1.17	-0.24	368
A3.14	4.39	0.93	3.37	-1.85	363
A3.15 <sup>a</sup>	4.06	0.73	-1.09	-0.10	357
<b>Business strategy</b>					
<b>Differentiation</b>					
A4.1	4.36	0.86	2.44	-1.52	367
A4.2	4.54	0.72	3.32	-1.70	368
A4.3	4.56	0.67	4.31	-1.78	369
A4.4	4.38	0.84	1.72	-1.38	368
<b>Overall cost leadership</b>					
A4.6	3.87	1.20	-0.11	-0.91	371
A4.7	4.40	0.91	3.35	-1.82	367
<b>Relative Price</b>					
A4.5 <sup>a</sup>	2.37	1.43	-1.13	0.55	370

	Mean	Std. Dev.	Kurtosis	Skewness	N
<b>Product adaption (superiority)</b>					
A5.1	3.73	1.13	-0.08	-0.75	367
A5.2	4.59	0.64	2.65	-1.61	371
A5.3	3.85	1.01	0.53	-0.83	370
A5.4	3.89	1.03	0.13	-0.75	367
A5.5	4.02	0.89	0.91	-0.85	370
A5.6	4.45	0.69	2.11	-1.27	372
A5.7	4.16	0.90	0.93	-1.06	370
<b>Profitability 1996</b>					
A6	3.59	1.20	-0.74	-0.41	344
<b>Sales growth 1996</b>					
A7	3.61	1.08	-0.45	-0.40	340

## APPENDIX 4: TEST OF PROPERTIES OF MEASURES FOR MARKET ORIENTATION INFORMATION SYSTEM

The parceling procedure for market orientation information system is discussed in Chapter 6.2 and the Principal component analysis is used to identify the facets of each of the dimensions. The results reported here are the rotated solutions. The measure numbers refer to the list of measures reported in Appendix 2.

### 1. The information generation dimension

The initial analysis in Table A and shows measure 1.3 has unique variance due to its considerable loading on factor 2. Item 1.3 is to which extent the hotel does in-house market research. It is no obvious reason why that item should constitute a separate facet of information gathering and the item is deleted. The analysis after item 1.3 has been deleted shows one facet of information generation (see Table B) and thus the parcel is computed based on the sum of the items divided on the numbers of items.

**TABLE A**  
Principal component analysis of information generation (sorted by size)

Measure	Factor 1	Factor 2
A1.8	.69975	.00014
A1.5	.65585	.23946
A1.6	.65070	-.12525
A1.2	.59899	.05607
A1.7	.57139	-.20980
A1.4	.54968	-.04386
A1.10	.53646	-.22202
A1.1	.50921	.33309
A1.3	.23165	.76087
A1.10	.36258	-.52958

**TABLE B**  
Revised principal component analysis of information generation (sorted by size)

Measure	Factor 1	Communality
A1.8	.70039	0.49
A1.6	.65412	0.43
A1.5	.64796	0.42
A1.2	.59814	0.36
A1.7	.57615	0.33
A1.4	.54853	0.30
A1.10	.54286	0.30
A1.1	.50282	0.25
A1.9	.37827	0.14
<b>Eigenvalue</b>	<b>3.02 (33.56%)</b>	

## 2. The information dissemination dimension

The principal component analysis shows two facets of information dissemination (see Table C). The measures seem to be clustered into two groups, where the first factor captures contact and communication among functions and departments while the other factor captures the kind of information being disseminated. The two factors are equally weighed in the parcel.

**TABLE C**  
**Principal component analysis of information dissemination (sorted by size)**

<b>Measure</b>	<b>Factor 1</b>	<b>Factor 2</b>	<b>Communality</b>
A1.13	<i>.71028</i>	.16322	<i>0.53</i>
A1.14	<i>.68537</i>	-.05516	<i>0.47</i>
A1.12	<i>.65733</i>	.33892	<i>0.54</i>
A1.11	<i>.52615</i>	-.02616	<i>0.28</i>
A1.17	-.11389	<i>.75791</i>	<i>0.59</i>
A1.18	.04947	<i>.66701</i>	<i>0.45</i>
A1.16	.18485	<i>.64311</i>	<i>0.45</i>
A1.15	.38131	<i>.43794</i>	<i>0.34</i>
<b>Eigenvalue</b>	<i>1.89 (23.56%)</i>	<i>1.77 (22.11%)</i>	

### 3. The responsiveness dimension

Due to high kurtosis and skewness values item 2.13 (complaint response) is excluded. The remaining measures are divided into three facets (see Table D). Factor 1 seems to be a general responsiveness factor including if the market information is used for decisions in general. Factor 2 represents aspects regarding product offering to the market. Factor 3 represents responsiveness regarding competitors' changes in market behavior. The 3 facets (factors) are equally weighted in the computing of the responsiveness parcel.

**TABLE D**  
**Principal component analysis of information responsiveness (sorted by size)**

<b>Measure</b>	<b>Factor 1</b>	<b>Factor 2</b>	<b>Factor 3</b>	<b>Communality</b>
A2.14	<i>.60475</i>	.14890	.09124	<i>0.40</i>
A2.7	<i>.58536</i>	.19023	-.10111	<i>0.39</i>
A2.1	<i>.57481</i>	.08622	.21759	<i>0.39</i>
A2.5	<i>.55048</i>	-.23153	-.12749	<i>0.37</i>
A2.10	<i>.47439</i>	.12171	.06328	<i>0.25</i>
A2.11	<i>.46649</i>	.21781	-.02232	<i>0.27</i>
A2.3	<i>.45211</i>	.34028	.16801	<i>0.35</i>
A2.2	-.07617	<i>.66598</i>	-.24576	<i>0.51</i>
A2.4	.23539	<i>.62407</i>	.14807	<i>0.46</i>
A2.9	.18413	<i>.58332</i>	.23941	<i>0.43</i>
A2.6	.25966	<i>.57997</i>	.14598	<i>0.43</i>
A2.8	-.00762	-.05344	<i>.83499</i>	<i>0.70</i>
A2.12	.06692	.27979	<i>.71490</i>	<i>0.60</i>
<b>Eigenvalue</b>	<b>2.16 (16.62%)</b>	<b>1.89 (14.55%)</b>	<b>1.50 (11.54%)</b>	

## **APPENDIX 5: QUESTIONNAIRE**



NHH (Cati)

Prosjekt

8506

Skjemanummer

1

Goddag, jeg heter .... og ringer fra Markeds- og Medieinstituttet A/S i Oslo. Vi gjennomfører en undersøkelse om KONKURRANSESTRATEGIER I NORSK HOTELLNÆRING i regi av SND og Norges Handelshøyskole. I den forbindelse vil vi gjerne snakke med Administrerende Direktør/ Daglig leder ved hotellet.

Goddag, jeg heter .... og ringer fra Markeds- og Medieinstituttet A/S i Oslo. Vi gjennomfører en undersøkelse om KONKURRANSESTRATEGIER I NORSK HOTELLNÆRING i regi av SND og Norges Handelshøyskole. Studien skal bidra til bedret innsikt i norsk hotellnæring og resultatene kan være et bidrag til å øke næringens konkurranseevne. Vi håper du har anledning til å delta i telefonintervjuet som tar mellom 10 og 12 minutter. Du vil få tilendt et sammendrag av undersøkelsen når resultatene foreligger. Dine svar vil bli behandlet konfidensielt, og det er kun totalresultatene for de 400 hotellbedriftene som deltar i undersøkelsen som vil bli offentliggjort.

Det er ulike måter en bedrift kan SAMLE INN INFORMASJON på. Det vil nå bli listet opp en del påstander som vi ber deg ta stilling til. Spørsmålene besvares ut fra en skala fra 1 til 5, som vi vil be deg skrive ned. 1 er helt uenig, 2 er delvis uenig, 3 er verken enig eller uenig, 4 er delvis enig og 5 er helt enig. Med andre ord vil tallet 5 representere en meget god beskrivelse av hotellet, mens 1 er en lite passende beskrivelse av hotellet. Oppgi det tallet du mener passer best til påstandens grad av riktighet.

## LES KLART OG TYDELIG OPP EN OG EN PÅSTAND

	Helt uenig	Delvis uenig	Verken enig eller uenig	Delvis enig	Helt enig	Vet ikke	
• Ved dette hotellet har vi møter med de viktigste kundene minst en gang i året for å finne ut hvilke produkter og tjenester de vil ha behov for i fremtiden	1	2	3	4	5	6	1
• Personer fra andre avdelinger enn salg og markedsføring er i direkte kontakt med kunder for å lære hvordan disse kan betjenes bedre.....	1	2	3	4	5	6	2
• Ved dette hotellet foretar vi selv utarbeidelse og gjennomføring av markedsundersøkelser.....	1	2	3	4	5	6	3
• Vi er svært tidlig ute til å oppdage endringer i hva våre kunder foretrekker ved et hotellprodukt.....	1	2	3	4	5	6	4
• Vi foretar en systematisk rundspørring blant våre hotellkunder minst en gang i året for å vurdere kvaliteten på vårt tilbud.....	1	2	3	4	5	6	5
• Vi er svært ofte i kontakt med de som kan påvirke våre kunders kjøp av hotelltjenester, f.eks. reisebyrå, reisesekretær.....	1	2	3	4	5	6	6
• Vi samler ofte inn bransjeinformasjon gjennom uformelle kanaler, f.eks. lunsj med kollegaer fra andre hoteller, samtaler med leverandører.....	1	2	3	4	5	6	7
• Ved dette hotellet samler flere avdelinger inn informasjon om viktige konkurrenter.....	1	2	3	4	5	6	8
• Vi er sene til å oppdage viktige endringer i hotellbransjen, f.eks. nye konkurrenter, ny teknologi, reguleringer.....	1	2	3	4	5	6	9
• Vi vurderer regelmessig om endringer i omgivelsene, f.eks. moms, nye allianser, nye reisemønstre kan ha innvirkning på kundene.....	1	2	3	4	5	6	10
• Det er stor grad av uformelle samtaler blant hotellets ansatte om konkurrentenes taktikk og konkurransestrategier.....	1	2	3	4	5	6	11
• Vi har møter som omfatter personer fra alle hotellets avdelinger minst en gang i kvartalet for å diskutere markedstrender og markedsutvikling.....	1	2	3	4	5	6	12

	Helt uenig	Delvis uenig	Verken enig eller uenig	Delvis enig	Helt enig	Vet ikke	
• Personer fra hotellets salgs- og markedsføringsfunksjon bruker mye tid på å diskutere kundenes fremtidige behov med personer fra andre avdelinger i hotellet.....	1	2	3	4	5	6	13
• I vårt hotell sirkuleres regelmessig dokumenter, f.eks rapporter, analyser som inneholder informasjon om våre kunder.....	1	2	3	4	5	6	14
• Når noe viktig skjer hos en viktig kunde eller i et viktig marked, vil alle i hotellet få vite om dette i løpet av svært kort tid.....	1	2	3	4	5	6	15
• Informasjon om kundetilfredshet blir regelmessig fordelt til alle ansatte ved hotellet .....	1	2	3	4	5	6	16
• Det er liten kommunikasjon mellom de som arbeider med markedsføring og de andre avdelingene i hotellet .....	1	2	3	4	5	6	17
• Når en avdeling oppdager noe viktig hos en av konkurrentene, er de sene til å varsle de andre avdelingene .....	1	2	3	4	5	6	18
<b>2</b>	<b>Jeg vil nå stille en del spørsmål knyttet til hvordan hotellet FORETAR BESLUTNINGER OG IVERKSETTER AKTIVITETER rettet mot markedet.</b>						
	Spørsmålene skal fortsatt besvares ut fra en skala på 1 til 5, der 1 er helt uenig og 5 er helt enig. Altså hvor enig er du i at .....						
	<b>LES KLART OG TYDELIG OPP EN OG EN PÅSTAND</b>						
	Helt uenig	Delvis uenig	Verken enig eller uenig	Delvis enig	Helt enig	Vet ikke	
• Det tar lang tid før vi bestemmer oss for hvordan vi skal reagere på prisendring hos en av våre konkurrenter.....	1	2	3	4	5	6	1
• Prinsipper for markedssegmentering bestemmer utviding av nye produkter og tjenester ved dette hotellet .....	1	2	3	4	5	6	2
• Av ulike årsaker synes vi å overse endringer i våre kunders behov for produkter og tjenester.....	1	2	3	4	5	6	3
• Vi sjekker regelmessig om vår produkt- og tjenesteutvikling er i tråd med hva kundene ønsker...	1	2	3	4	5	6	4
• Våre markedsplaner er mer et resultat av hvilke ressurser vi har enn av analyser av kundenes behov	1	2	3	4	5	6	5
• Ledere av hotellets ulike avdelinger møtes regelmessig for å planlegge hvordan hotellet skal reagere på endringer i omgivelsene .....	1	2	3	4	5	6	6
• Det vi tilbyr ved hotellet er mer et resultat av intern politikk enn av reelle markedsbehov.....	1	2	3	4	5	6	7
• Hvis en viktig konkurrent hadde rettet en intensiv kampanje mot våre kunder ville vi besvart denne umiddelbart.....	1	2	3	4	5	6	8
• Markedstiltak ved hotellet er svært godt koordinert på tvers av avdelinger og funksjoner.....	1	2	3	4	5	6	9
• Vi har ingen formelle rutiner for behandling av klager ved hotellet .....	1	2	3	4	5	6	10
• Selv om vi skulle komme opp med en god markedsføringsplan, ville vi neppe være i stand til å gjennomføre denne i rett tid.....	1	2	3	4	5	6	11
• Vi er raske til å reagere på endringer i konkurrentenes produkttilbud.....	1	2	3	4	5	6	12
• Når vi oppdager at kunder er misfornøyde med kvaliteten på vår service, tar vi umiddelbart affære....	1	2	3	4	5	6	13
• Når vi oppdager at kunder ønsker at vi skal gjøre endringer med produkter og tjenester, vil de berørte avdelinger legge ned felles innsats for å imøtekomme behovene.....	1	2	3	4	5	6	14
• I forhold til konkurrentene er hotellet ofte først på markedet med nye produkter og tjenester.....	1	2	3	4	5	6	15

	Helt uenig	Delvis uenig	Verken enig eller uenig	Delvis enig	Helt enig	Vet ikke	
• I forhold til konkurrentene har vi utviklet vårt tjenestetilbud svært mye det siste året .....	1	2	3	4	5	6	16
• I løpet av det siste året har vi kopiert flere løsninger og ideer fra andre hoteller .....	1	2	3	4	5	6	17
<b>3</b>	<b>Vi ber deg nå ta stilling til noen påstander knyttet til hotellets ansatte</b>						
Er du helt uenig, delvis uenig, verken enig eller uenig, delvis enig eller helt enig i at.....							
<b>LES KLART OG TYDELIG OPP EN OG EN PÅSTAND</b>							
	Helt uenig	Delvis uenig	Verken enig eller uenig	Delvis enig	Helt enig	Vet ikke	
• De ansatte diskuterer ofte hvordan hotellet skal kartlegge kundenes behov og ønsker .....	1	2	3	4	5	6	1
• De ansatte har mange ulike meninger om hvordan informasjon om konkurrenter kan skaffes .....	1	2	3	4	5	6	2
• Det er mange forskjellige synspunkter i bedriften om hvordan vi kan bli bedre til å møte konkurransen fra andre hoteller .....	1	2	3	4	5	6	3
• Det er mye uenighet i ledergruppen om hvilke type informasjon vi trenger for å ta beslutninger som berører markedet .....	1	2	3	4	5	6	4
• Enkelte av de ansatte stiller ofte spørsmålstegn med ledelsens tolkning av markedet .....	1	2	3	4	5	6	5
• Vi samler inn mye informasjon om kunde grupper som vi idag ikke betjener .....	1	2	3	4	5	6	6
• I forhold til våre konkurrenter har vi mye mer kunnskaper om nye trender i hotellbransjen .....	1	2	3	4	5	6	7
• Vi konsentrerer all vår oppmerksomhet mot kunder og kunde grupper vi allerede har .....	1	2	3	4	5	6	8
• Sammenlignet med våre viktigste konkurrenter er vi mye mer opptatt av å oppdage nye kunde grupper .....	1	2	3	4	5	6	9
• I forhold til konkurrentene er vi mye mer opptatt av å se hva konkurrenter i andre markeder foretar seg .....	1	2	3	4	5	6	10
• Det er mulig å lage en effektiv skriftlig instruks som forteller hvordan vi samler inn markedsinformasjon, samt sprer og bruker denne informasjonen .....	1	2	3	4	5	6	11
• Det er mulig for en person i ledelsen å vite alt som hotellet gjør for å samle inn, spre og reagere på markedsinformasjon .....	1	2	3	4	5	6	12
• For å få en god forståelse av hotellets kunder og konkurrenter er det svært viktig at de ansatte har lang erfaring fra dette hotellet .....	1	2	3	4	5	6	13
• Det er nødvendig for de ansatte å være i kontakt med andre avdelinger for å få en god forståelse av markedet .....	1	2	3	4	5	6	14
• Det er enkelt for en konkurrent å få innsikt i hvordan vi skaffer oss informasjon om markedet, sprer denne informasjonen i bedriften, samt hvordan vi bruker informasjonen i beslutninger ...	1	2	3	4	5	6	15

4 Bedrifter har ulike måter å OPPNÅ KONKURRANSEEVNE på. Ta stilling til følgende påstander.						
På en skala fra 1 til 5, der 1 er helt uenig og 5 er helt enig, hvor enig er du i at vår konkurranseevne er basert på ....						
LES KLART OG TYDELIG OPP EN OG EN PÅSTAND						
	Helt uenig	Delvis uenig	Verken enig eller uenig	Delvis enig	Helt enig	Vet ikke
• At vi skal være mer fleksible med hensyn til å tilby kundene tilpassede løsninger enn gjennomsnitts bedriften i bransjen.....	1	2	3	4	5	6
• At vi skal ha et bedre omdømme i markedet enn gjennomsnittsbedriften i bransjen.....	1	2	3	4	5	6
• At vårt tilbud skal være bedre tilpasset kundenes behov og ønsker enn gjennomsnittsbedriften i bransjen.....	1	2	3	4	5	6
• At vi skal ha en mer omfattende kundeservice enn gjennomsnittsbedriften i bransjen.....	1	2	3	4	5	6
• At vi skal ha lavere priser enn gjennomsnittsbedriften i bransjen.....	1	2	3	4	5	6
• At vi skal ha lavere kostnader per overmattingsgjest enn gjennomsnittsbedriften i bransjen.....	1	2	3	4	5	6
• At vi skal ha en bedre kostnads kontroll enn gjennomsnittsbedriften i bransjen.....	1	2	3	4	5	6
5 Nå nærmer det seg slutten på intervjuet.						
Vi ber deg nå ta stilling til hvordan du mener HOTELLETS TOTALE TILBUD oppleves av kundene i markedet. Igjen ønsker jeg at du besvarer ut fra en skala på 1 til 5, der 1 er helt uenig og 5 er helt enig.						
LES KLART OG TYDELIG OPP EN OG EN PÅSTAND						
	Helt uenig	Delvis uenig	Verken enig eller uenig	Delvis enig	Helt enig	Vet ikke
• Kundene oppfatter hotellets tilbud til å omfatte mange fordeler som ikke er tilgjengelige hos konkurrentene .	1	2	3	4	5	6
• Hotellet tilbyr et helhetlig produkt som gir god verdi for den prisen kunden betaler.....	1	2	3	4	5	6
• Når det gjelder å møte kundenes behov, er hotellets helhetlige tilbud bedre enn konkurrentene.....	1	2	3	4	5	6
• Med utgangspunkt i kundenes oppfatning av kvalitet vil vi påstå at hotellets helhetlige produktkvalitet er bedre enn gjennomsnittshotellet i bransjen.....	1	2	3	4	5	6
• Hotellets tilbud kan beskrives til å ha et bedre pris/kvalitetsforhold for kundene enn hva som er tilfellet hos konkurrentene.....	1	2	3	4	5	6
• De sterke sidene ved hotellets tilbud er lett å beskrive som nyttige og viktige overfor kunden.....	1	2	3	4	5	6
• Fordelene ved hotellets tilbud er lett å få øye på for kunden.....	1	2	3	4	5	6
• Våre kunder er svært tilfredse med hotellet.....	1	2	3	4	5	6
• Kundenes forventninger blir i stor grad overgått.....	1	2	3	4	5	6
• Sammenlignet med våre kunders idealhotell er våre kunder svært godt fornøyd med dette hotellet.....	1	2	3	4	5	6
• Våre kunder sier positive ting om hotellet til andre personer.....	1	2	3	4	5	6
• Våre kunder anbefaler i stor grad hotellet til venner og kollegaer.....	1	2	3	4	5	6
• Våre kunder oppfordrer venner til å bruke hotellet.....	1	2	3	4	5	6
• Våre kunder vurderer oss alltid som deres førstevalg når de har muligheten til å benytte vårt hotell.....	1	2	3	4	5	6
• Våre kunder vurderer å bruke oss mer de kommende årene.....	1	2	3	4	5	6
• Våre kunder ville sannsynligvis byttet til konkurrentene hvis konkurrentene reduserte prisene noe.....	1	2	3	4	5	6

<b>6</b>	<b>Til slutt ber vi deg ta stilling til LØNNSOMHET OG SALGSVEKST ved bedriften. Ta utgangspunkt i hva du tror er situasjonen.</b>
	Sammenlignet med deres viktigste konkurrenter, hadde dere i 1996 svakere lønnsomhet, noe svakere lønnsomhet, omtrent lik lønnsomhet, noe bedre lønnsomhet eller bedre lønnsomhet?
	Svakere lønnsomhet..... 1
	Noe svakere lønnsomhet ..... 2
	Omtrent lik lønnsomhet ..... 3
	Noe bedre lønnsomhet..... 4
	Bedre lønnsomhet..... 5
	Vet ikke..... 6
	Vil ikke svare..... 7
<b>7</b>	<b>Sammenlignet med deres viktigste konkurrenter hadde dere i 1996 svakere salgsvekst, noe svakere salgsvekst, omtrent lik salgsvekst, noe bedre salgsvekst eller bedre salgsvekst?</b>
	Svakere salgsvekst..... 1
	Noe svakere salgsvekst ..... 2
	Omtrent lik salgsvekst ..... 3
	Noe bedre salgsvekst..... 4
	Bedre salgsvekst ..... 5
	Vet ikke..... 6
	Vil ikke svare..... 7

<b>8</b>	<b>Avslutningsvis vil jeg gjerne registrere noen bakgrunnsopplysninger for den videre analysen</b>
	Hva var hotellets omtrentlige omsetning i 1996? Noter omsetning i millioner.....
<b>9</b>	<b>Har du regnet ut beleggsprosenten for 1996?</b>
	Ja..... 1
	Nei ( Merk av, ⇒ 11 )..... 2
	Vet ikke/Husker ikke ( Merk av, ⇒ 11 )..... 3
<b>10</b>	<b>Hva var gjennomsnittlig belegg i 1996?</b>
	Noter gjennomsnittlig belegg i prosent (%)....
<b>11</b>	<b>Er hotellet medlem av en hotellkjede?</b>
	Ja..... 1
	Nei..... 2
<b>12</b>	<b>Hvor mange måneder i året har hotellet åpnet?</b>
	Tusen takk for at du tok deg tid til å delta i undersøkelsen
	Noter antall måneder.....
<b>13</b>	<b>Foretaksnummer</b>
	<b>REGISTRER</b> .....
<b>14</b>	<b>Hotell</b>
	Navn..... ++